MELOUNOVA-HAUSLEROVA, O.

2

Proteins from thick juices and their degradation products formed during the purification process.— P. Pavlas and O. Melounová-Hauslerová. *Listy Cukrovar.* 72, 265–8(1956).—Proteins in sugar-beet processing juices were ppid. with 3% CH_3CO_2H (I) and 10% tannin (II) solns. The amt. of degradation products was calcd. from the difference (II − I). The av. values were: in diffusion juice I 65.8, and II 93.5; in thick juice (III) I 1.2, and II 8.0; removed by defecation and satn. 97.7 of I ppt., and 91.4 of total proteins (all values in mg./100 g. of sugar). For isolation of proteins 1 l. of III was dild. with 1 l. of distd. water and 60 g. of I was added, left overnight, and then filtered. The filtrate was neutralized with ammonia to pH of 6, and II was added. A part from II pptn. was dissolved in 98% EtOH. Paper chromatograms were carried out as in previous work (preceding abstr.). The following amino acids were identified: aspartic, glutamic, and γ-aminobutyric acids, cystine, serine, glycine, threonine, alanine, hydroxyproline, tyrosine, methionine, valine, tryptophan, phenylalanine, leucine, isoleucine, proline, lysine, histidine, and arginine. Proteins were degraded during processing into albumins, peptones, peptides, and amino acids. In the products from alkali treatment were found peptides, aspartic and glutamic acids, serine, glycine, lysine and arginine. N was detd. by the Kjeldahl method. — T. Jurecic

MELOUNOVA-HAUSLEROVA, O.

CZECHOSLOVAKIA/Chemical Technology - Chemical Products and Their Application. Carbohydrates and Refinement. I-11

Abs Jour : Ref Zhur - Khimiya, No 1, 1958, 2785

Author : Pavlas, P., Melounova-Hauslerova, O.
Inst : -
Title : Separation of Amino Acids in Sugar Products by the Method of Electrophoresis and Proof of the Presence Therein of Gamma-Amino-Butyric Acid and Ornithine.

Orig Pub : Listy cukrovarn., 1957, 73, No 6, 131-135

Abstract : By the method of electrophoresis amino acids have been separated in purified samples of diffusion juice and heavy sirup; two groups of neutral amino acids were then isolated and concentrated, after which they were separated by means of paper chromatography and electrophoresis. The results are shown in the form of electrophoregrams. In the group which is more rapidly deposited at the cathode only gamma-amino butyric acid was detected. In the

Card 1/2

MELOUNOVA-HAUSLEROVA, OLGA

CZECHOSLOVAKIA/Chemical Technology. Chemical Products and Their Application. Carbohydrates and Refinement. H-26

Abs Jour: Referat Zhur-Khimiya, No 5, 1958, 15931.

Author : Pavlas Petr, Melounova-Hauslerova Olga
Inst :
Title : Amino Acids Involved in the Formation of Melanoids

Orig Pub: Listy cukrovarn., 1957, 73, No 8, 177-182.

Abstract: From molasses of refining and sugar-manufacturing plants the melanoids were separated and subjected to purification and fractionation. 12 fractions of the coloring substances were analyzed for ash and nitrogen content and then subjected to acid and alkali hydrolysis. The hydrolysates were analysed by chromatographic and electrophoretic methods. It was ascertained that in the formation of the melanoids of molasses take part all the amino acids that occur in the juices and proteins of beets. The assumption is made

Card : 1/2

Melounová-Häuslerová, Olga

Participation of amino acids in the formation of melanoidins. Petr Pavlas and Olga Melounová-Häuslerová. *Listy Cukrovar.* 73, 177-82(1957).—All the amino acids (I) present in sugar-beet juice participate in the formation of melanoidins (II). In prepn. of II, molasses was dild. and acidified with HCl. The ppt. formed on the addn. of Na_2SO_4 was washed with acidified water, dried, extd. with ether and alc., dissolved in NaOH, pptd. with HCl, and washed until free of Cl. The thus-obtained raw II were further purified by dissolving in NaOH, pptg. in AcOH, dissolving in LiOH, and pptg. with AcOH. Twelve purified fractions of II were prepd. by similar procedures, NaOH, LiOH, and Li_2CO_3 being used as dissolving, and HCl, AcOH, HF, and $MgSO_4$ as pptg. agents. All the preparations had solids about 90, ash between 0.05 and 0.25, and N between 9.63 and 9.61%. N was detd. by the Dumas method. All the fractions had acidic properties. Acid salts of Ag^+, Cu^{++}, and Ca^{++} were prepd. by adding Li salt of II to alc. solns. of $AgNO_3$, $CuSO_4$, and $CaCl_2$. II formed acid and alk. salts. The salts of heavy metals and alk. earths were insol. An increase in pH raised the intensity of color of II solns. Samples of II were hydrolyzed by boiling at 105° in 6*N* HCl, or by heating at 125° in a satd. soln. of $Ba(OH)_2$ for 24 hrs. Thus-obtained I were sepd. by electrophoresis at pH of 5.6, p.d. of 1200 v., and current of 6–10 ma. In all cases aspartic, glutamic, and aminolactic acids, together with neutral and basic I, were identified. Cystine was oxidized to cysteine with H_2O_2 in HCOOH soln. and identified by electrophoresis. Two-dimensional chromatography of acid hydrolyzates (with phenol-water 3:1 and n-butanol-

NS

PAVLAS, PETR; MELOUNOVA-HAUSLEROVA, OLGA.

4
14E3d

AcOH-water 4:1:5) showed aspartic, glutamic, α-amino-
lactic acids, serine, glycine, threonine, alanine, tyrosine,
lysine, histidine, arginine, proline, methionine, threonine,
valine, tryptophan, phenylalanine, leucine, and isoleucine.
Serine, threonine, and histidine were absent in the alk.
hydrolyzates, but all other I were found in the acid hy-
drolyzate, plus ornithine, cystine, and methionine sulfoxide.
The proportion of I in II is const. No free I were found in
II before hydrolysis. T. Jurecki

2-/2

CZECHOSLOVAKIA / Chemical Technology. Chemical Products H
and Their Application. Carbohydrates
and Their Processing.

Abs Jour: Ref-Zhur-Khimiya, No 3, 1959, 33006.

Author : Pavlas, P., Molounova-Hauslerova, O.
Inst : Not given.
Title : The Composition of the Sugar Beet and Juices in the Industrial Season of 1957-58.

Orig Pub: Listy cukrovarn., 1958, 74, No 8, 175-183.

Abstract: The composition of sugar beets of 65 sugar refineries, and diffused juices and syrups of 49 sugar refineries in Czechoslovakia, are submitted. In 1957, the growth of beets took place in an ample supply of moisture. The average weight of the roots was 578.2 g.; sugar content, 15.71% (18.64-14.77%); pulp, 4.41%;

Card 1/3

251

CZECHOSLOVAKIA / Chemical Technology. Chemical Products H
and Their Application. Carbohydrates
and Their Processing.

Abs Jour: Ref Zhur-Khimiya, No 9, 1959, 33006.

Abstract: soluble ashes, 0.51%. Diffused juices contained an increased number of nitrogenous substances and ashes. The average composition data are: (1) for diffused juices: dry substances, 17.89%; high quality, 90.43 units; nonsugars in 100 g. of sugar, 10.56% (including reducing substances, 0.777%; total nitrogen, 0.564%; harmful nitrogen, 0.278%; ashes, 2.73%); (2) for syrups, respectively: 59.32%, 93.77 units, 6.66%, 0.114%, 0.378%, 0.336% and 2.31%. The contents of different forms of nitrogen in the syrups were submitted. The result of the juice purification constituted 37%. The syrups were distinguished by their low alkanility (0.033% CaO) and a large

Card 2/3

24 3300 1395.1051, 1395 27269 S/077/61/006/005/004/004
D051/D113

AUTHORS: Belinskaya, G.I., and Melovatskiy, B.V.

TITLE: Determining the size of photographic pictures by means of photometry

PERIODICAL: Zhurnal nauchnoy i prikladnoy fotografii i kinematografii, v. 6, no. 5, 1961, 371-376

TEXT: Considering the inexactness of visual measurement of photographic pictures by microscopes, comparators etc., the authors developed a photometric method permitting a more accurate determination (approximately by 1 order) of the size of photographs of contrasty subjects. The method is based on the use of so-called $\varkappa$ -curves which illustrate the change in blackening density in point 0 [Abstracter's note: for explanation see below]. This change depends on the blackening density of the photographic picture under the assumption of symmetry of the function of the optical system [A (x)]. Point 0 - in reality there are two points 0 which in the case of symmetry of the function have equal density levels - marks the intersection of

Card 1/6

the real and the ideal graph of blackening density distribution of a photographic picture. The ideal graph represents the blackening densities on the edge of a photographic picture, assuming that the subject contrasts and the blackening densities in the photograph correspond. Fig. 3 shows that, if the blackening densities at 0 are known, the real size of the photographic picture on the abscissa can be photometrically found. The $\varkappa$ - curves of Fig. 7, which show the dependence of the blackening density D_1 at point 0 on the blackening density of the photographic picture D (Fig. 6) hold for pictures obtained on Kinonegativ ДК (DK) films (curve 1) and Panchrom X-800 (Kh-800) (curve 2). The films were developed with developer No - during 8 minutes at 20°C, the exposure having been carried out behind a КС--14 (KS-14) red light filter. The data for plotting these curves were experimentally obtained with a special installation (diagram in Fig. 8) which is described in detail. The installation is a combination of an optical, a photographic recording, and a measuring system, all parts being aligned along the optical axis. The relative aperture of the optical system can have the values 1:33, 1:50, 1:120 in addition to those of the objective РО-2 (RO-2) when its internal iris diaphragm is stopped down. The interchangeable diaphragm (3) is recorded on the film (7). The size of the optical

image of the diaphragm (3) in the plane of the film is measured with a microscope (10). The photographs of the diaphragm opening obtained were pictures with different blackening densities (D = 0.2-2.6 above fog density) and of different size B (0.2-8 mm [B - size of the diaphragm opening]). Blackening density D_1 and size B were established using an МФ -4 (MF-4) microphotometer. It was found that the blackening density D_1, which corresponds to the real size of the picture, changes depending on the density of the photograph in accordance with the $\varkappa$ -curves of Fig. 7. This law was verified for pictures 0.2-8 mm in size. Evidently, it will also hold for photographic pictures larger than 8 mm. The new method excludes errors arising from visual measurements due to unsharpness around the edges of the photographic picture. After microphotometrically determining the blackening density D of the photographic picture near the edge, the blackening density D_1 through the corresponding $\varkappa$ -curve will also be found. Then, using the measuring drum of the microphotometer, two consecutive readings will be made, corresponding to D_1 on the edges of the picture. The difference between these readings is equal to the real size of the picture. There are 9 figures

27269

S/077/61/006/005/004/004
Determining the size of photographic pictures ... D051/D113

and 2 references: 1 Soviet and 1 non-Soviet-bloc. The reference to the English language publication reads as follows: R.L.Lamberts, G.C.Higgins, R.N.Wolfe, J.Opt.Soc.America, 1958, 48, 487.

ASSOCIATION: Institut khimicheskoy fiziki AN SSSR (Institute of Chemical Physics of the AS USSR)

SUBMITTED: July 26, 1960

Card 4/6

ROBUK, N.N., inzhener; MELOVTSOV, A.A., inzhener.

Welded and welded-cast stators for hydraulic turbines manufactured by the Kharkov (S.M.Kirov) Turbine Plant. Energomashinostroenie no.6:20-22 Je '56. (Hydraulic turbines) (MLRA 9:9)

MELOVTSOV, A.A., inzh.

Horizontal adjustable-blade hydraulic turbines with high operating speed. Energomashinostroenie 11 no.3:23-27 Mr '65. (MIRA 18:6)

ACC NR: AP7005617 (A, N) SOURCE CODE: UR/0413/67/000/002/0057/0057

INVENTOR: Ostashchenko, A. V.; Melovtsov, A. A.; Goryaystov, V. P.; Lyashko, V. V.; Fridman, L. I.; Rivlin, M. I.

ORG: None

TITLE: An open-pole synchronous machine. Class 21, No. 190462

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 2, 1967, 57

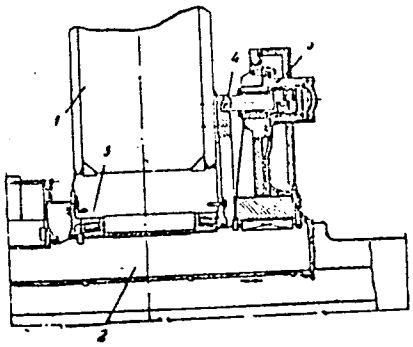
TOPIC TAGS: electric generator, electric protection equipment, hydraulic equipment, automatic control equipment

ABSTRACT: This Author's Certificate introduces: 1. An open-pole synchronous machine, e. g. a hydraulic generator, containing a device for anti-acceleration protection of the rotor by disengagement from the shaft of the drive unit when the permissible rotational velocity is exceeded. Design is simplified by making this device in the form of a system of hydraulic cylinders located around the circumference of the rotor shaft and rigidly connected to it. The cylinder rods are linked to the rotor under operating conditions and serve as disengaging elements. Bearings are used for coupling the rotor to the shaft. 2. A modification of this machine in which a slide valve with an electromagnetic drive is used for controlling the hydraulic cylinders. The pulse which operates this drive is fed from a speed relay.

UDC: 621.313.322.044.3-783.5

Card 1/2

ACC NR: AP7005617



1—rotor; 2—rotor shaft; 3—hydraulic cylinders; 4—cylinder rods; 5—bearings

SUB CODE: 09/ SUBM DATE: 21Dec63

Card 2/2

S/137/62/000/003/060/191
A006/A101

AUTHORS: Grigoryan, A., Meloyan, R., Grigoryan, M.

TITLE: Preparation of powder iron from local raw materials by the electrochemical method

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 3, 1962, 40, abstract 3G275 ("Prom-st' Armenii", 1961, no. 7, 31 - 35, Russian)

TEXT: Results are given obtained from research experiments concerning the preparation of Fe powder from concentrated Razdan ore by three different variants of the electrochemical method. The method with a dissoluble steel anode was found to be most promising. For the final selection of a method to obtain Fe-powder it is supposed to carry out investigations on direct reduction of Fe-concentrates by synthetic gas.

A. Epik

[Abstracter's note: Complete translation]

Card 1/1

MELOYAN, R., inzh.

Producing iron powder from pickling waste. Prom.Arm. [illegible] no.1:46-47 Ja '64. (MIRA 17:4)

1. Yerevanskiy metiznyy zavod.

MELOYAN, S., inzhener-tekhnolog

Mullite will be replaced by "bakor." Prom.Arm. 4 no.6: 41-42 Je '61. (MIRA 14:8)

1. Yerevanskiy mullitovo-steklotarnyy zavod. (Erivan—Refractory materials)

MELOYAN, S., inzhener-tekhnolog

Electrically smelted refractories and the "Armenia" (Bakor-33) refractory for glass furnaces. Prom.Arm. 5 no.6:44-45 Je '62. (MIRA 15:7)

1. Yerevanskiy mullitovo-steklotarnyy zavod.
(Armenia--Refractory materials)

S/131/61/000/012/001/002
B105/B101

AUTHOR: Meloyan, S. S.

TITLE: New molten refractory products for glass furnaces

PERIODICAL: Ogneupory, no. 12, 1961, 558 - 560

TEXT: The production and development of molten refractory products is described. In 1948 N. V. Solomin, A. A. Litvakovskiy, and N. M. Galdina found that addition of zirconium dioxide, reduction of fluxes, and partial substitution of bauxites by industrial alumina and kaolin increased the resistivity against the glass melt. From 1948 to 1950 the Yerevanskiy mullitovo-steklotarnyy zavod (Yerevan Mullite Glass Container Plant) manufactured molten refractory mullite products with additions of zirconic concentrate ($ZrSiO_4$). Since 1951 the Laboratoriya ogneuporov Gosudarstvennogo instituta stekla (Laboratory of Refractory Products of the State Institute of Glass) jointly with the Yerevan Mullite Glass Container Plant has made experiments with alumina, kaolin, and zirconic concentrate as charge components. These refractory materials are called baddeleyite corundum or Bakor in short, as their crystalline

New molten refractory products...

phases represent baddeleyite (ZrO_2) and corundum (α-Al_2O_3). Since 1959 the plant has produced Bakor on an industrial scale. The service life of Bakor in glass furnaces is 20-30 months at 1480-1500°C. Jointly with the Institute of Glass, experiments were made for the production of Bakor-33, which contains about 33% ZrO_2, 50% Al_2O_3, and 12-13% SiO_2. Industrial alumina, zircon free from iron, and industrial zirconium dioxide were used as charge components. Additions: marble dust and calcined soda. Bakor-33 is molten at 1900-2000°C and cast at 1800-1820°C. Heat treatment takes 8-10 days. Its specific gravity is 3.6 - 3.7 g/cm^3, the weight of unit volume 3.3 - 3.6 g/cm^3, the maximum apparent porosity 3%, and the softening point at 2 kg/cm^2 lies at 1740°C. Analysis: 13.72% SiO_2; 49.78% Al_2O_3; 0.71% FeO_3; 0.84% CaO; 0.11% TiO_2; 1.92% alkalies; 32.92% ZrO_2. By using Bakor-33 the glass melting temperature can be increased from 1450 to 1600°C and the service life of the glass furnaces to 36-48 months. Main sources of scrap (40%) are cracks, large shrinkage cavities, and convexity of lateral faces, which is mainly caused by the

Card 2/3

New molten refractory products...

imperfection of the production process.

ASSOCIATION: Yerevanskiy mullitovo-steklotarnyy zavod (Yerevan Mullite Glass Container Plant)

Card 3/3

S/032/63/029/004/012/016
A004/A127

AUTHORS: Voloshenko-Klimovitskiy, Yu.Ya., Vyacheslavov, A.A., Mel'shanov, A.F.

TITLE: Apparatus for testing materials under high-speed loads

PERIODICAL: Zavodskaya laboratoriya, no. 4, 1963, 482,- 486

TEXT: Although the interest in studying material properties under "high-speed" loads, during which the time up to destruction of the specimens is measured in milliseconds, is constantly growing, the mechanical characteristics under such loads have been practically not investigated at all due to the lack of adequate machines and instruments. The authors give a description of a laboratory-type installation for the testing of materials under high-speed loads, describing in detail the loading device, the apparatus for recording the loads and deformation of the specimens and point out that the loading pulses are in the range of from some milliseconds to one second. The block diagram of the electronic portion of the apparatus and an oscillogram of the high-speed load testing of Ст3 (St.3) grade steel and амг6 (AMG6) alloy are given. There are 3 figures.

ASSOCIATION: Institut mashinovedeniya (Institute of the Science of Machines)

Card 1/1

MEL'SHIYAN, Vyacheslav Vladimirovich

[Tula Province; an account of its economic geography] Tul'skaia oblast'; ekonomiko-geograficheskii ocherk. Tula, Tul'skoe knizhnoe izd-vo, 1959. 237 p. (MIRA 13:6)

(Tula Province--Economic conditions)

SOYUZOV, A., doktor tekhn. nauk; [illegible], A., inzh.

Development of pusher tugs and pushing methods in the United States. Rech. transp. 24 no.6:51-54 '65. [illegible]

KOROLEV, V.N., inzh.; TSIRKIN, M.Z., inzh.; LAVRUSHINA, N.S., inzh.; KONTOROVICH, L.M., inzh.; GUBAREV, A.A., inzh.; Prinimal uchastiye MEL'SHTEYN, L.G.

Insulation of bar winding heads of the stators of hydrogenerators and turbogenerators. Elektrotekhnika 36 no.8:16-18 Ag '65. (MIRA 18:9)

1. Leningradskiy filial Vsesoyuznogo nauchno-issledovatel'skogo instituta elektromekhaniki (for Mel'shteyn).

MELSKI, Boguslaw

"Environmental factors and bryophytes" by Kathryn Benson-Evans
Reviewed by Boguslaw Melski. Kosmos Biologia 11 no.2:209-211, 1962

MELSKI, Beguslaw

"Biology of reproduction in rubus " by G.J Dwerick. Reviewed by Beguslaw Melski. Kosmos Biologia 11 no.2:212 '62

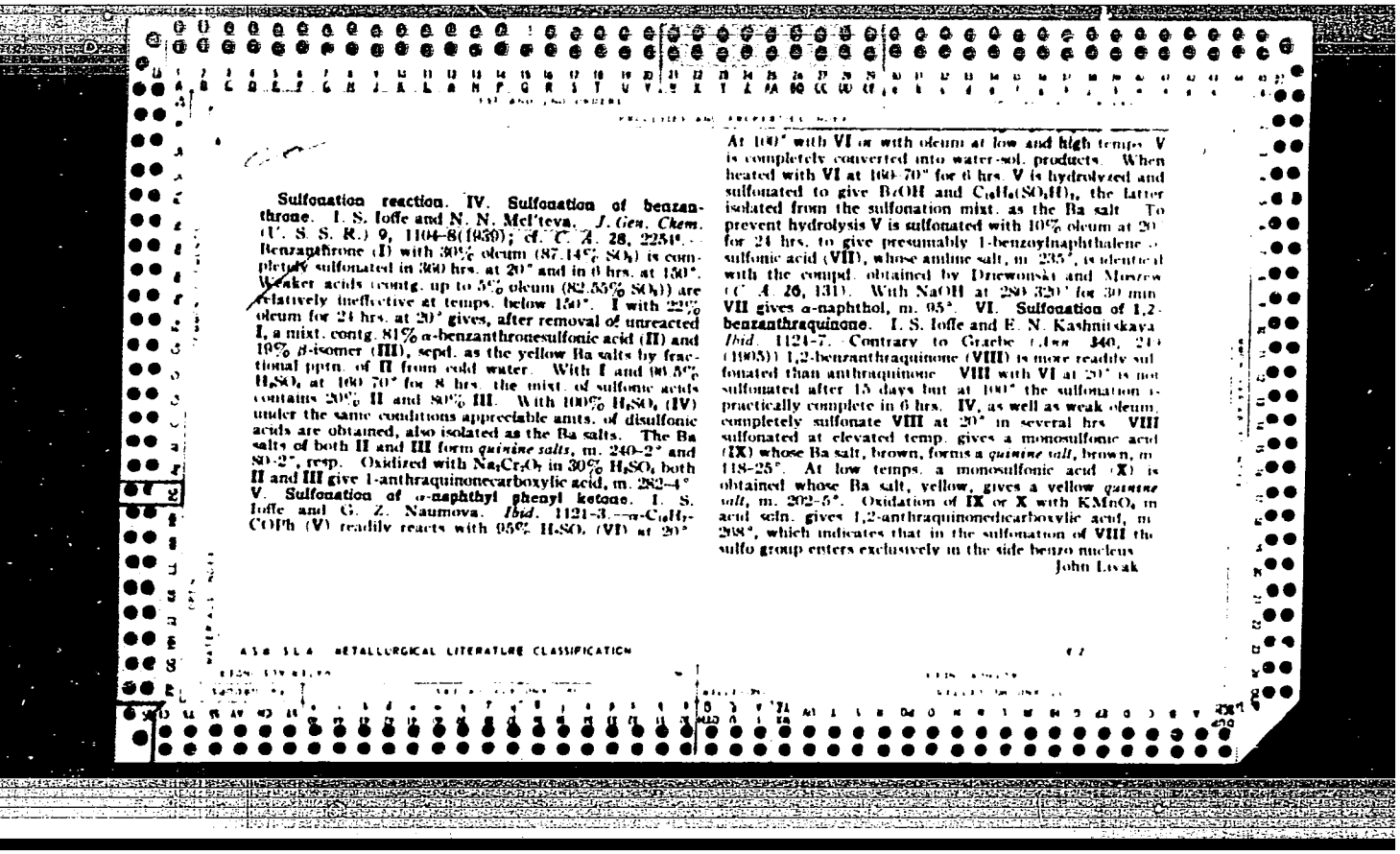
1. Zaklad Botanik, Szkola Glowna Gospodastwa Wiejskiego, Warszawa

CA

10

Action of bromine and chlorine on glycols of the acetylene series. Yu. S. Zal'kind and N. N. Mel'teva. *Zhur. Obshchei Khim.* (J. Gen. Chem.) 18, 990–1000(1948)(in Russian).—2,5-Dimethyl-3,5-octadiyne-2,7-diol (I) with Cl or Br gives a complex mixt. of products. When I (m. 132.5°, cf. Z. and Aizikovich, C. A. 31, 4287) (2.7 g.) in 50 ml. $CHCl_3$ was treated at −2° to −5° with 0.80 ml. Br, no HBr evolution was noted, but on attempts to remove the solvent by mild heating the product lost HBr and formed a black mass; removal of solvent *in vacuo* without heating gave viscous, yellow, liquid *dibromide* isomers, which could not be distd. A similar reaction, but using 4 atoms Br at 0–12°, led to partial loss of HBr in 2–48 hrs. standing, and the removal of the solvent *in vacuo* gave an undistillable residue, apparently a mixt. of *tetra-* and *hexabromides*. When 10 g. I in 50 cc. $CHCl_3$ was treated with 30.6 g. Br, the residue, after the removal of solvent, gave 1.2 g. solid, m. 167.9° (from EtOAc), corresponding to $C_{10}H_{14}OBr_8$; this substance is better obtained by the direct action of Br vapor on I; it is given the provisional formula: *CBr.CMe₂.O.CBrCBr₂CBr₂CBrMe-CH₂Br*, since on oxidation by Cr oxide in AcOH it yields a product $C_6H_8Br_4O_2$, m. 120–0.5°, which is also obtained by the action of 10% NaOH on the crude bromide. Small amts. of Br-contg. products, m. 101–3 and 117.8°, and 76.8°, were obtained but were not identified. The heptabromide is quite resistant to hydrolysis by 0.5 N alc. KOH, as no reaction occurs in 24 hrs. at room temp. and only a slow reaction at 50°; hydrolysis is 8% complete in 12 hrs. at 80–90°. Addn. of 2.5 g. Cl to 5 g. I in $CHCl_3$ at 5–6° yields 2.4 g. unreacted I and an oil, b_4 64–1.40°, which loses HCl slowly on distn., and appears to be a *dichloride*; when 4 atoms Cl were used, 5.0 g. I gave 5 g. ... and 2.0 g. oil, b_4 68–100°, apparently a *di-* and *tetrachloride* mixt. Use of 8 atoms Cl gave an undistillable yellow oil mixt. of *tetra-* and *hexa*-chlorides. An excess of Cl passed at 0° through I in $CHCl_3$ gave a mixt. of products which decompd. on distn., and only 1 definite product, b. 52.7° *in vacuo* (not specified), m. 42.3°, was obtained; this was $C_4H_6OCl_2$, identified as *dichloroacetone*; washing the product with H_2O and 10% NaOH gave a slowly crystg. oil, m. 81° (from ligroin), identified as *2,2-dimethyl-3,4-dichloro-5-keto-2,5-dihydrofuran*; the crude chlorination product oxidized with $KMnO_4$ gives dichloroacetone, HCO_2H, and the above ketofuran. The formation of the furan derivs. is believed to take place through the cyclization of the α,β-di-Cl ketone intermediate. Possible reaction mechanisms are discussed. G. M. K.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



Sulfonation reaction. IV. Sulfonation of benzanthrone. I. S. Ioffe and N. N. Mel'teva. *J. Gen. Chem.* (U. S. S. R.) 9, 1104–8(1939); cf. *C. A.* 28, 2254⁶.—Benzanthrone (I) with 30% oleum (87.14% SO_3) is completely sulfonated in 360 hrs. at 20° and in 6 hrs. at 150°. Weaker acids (contg. up to 5% oleum (82.55% SO_3)) are relatively ineffective at temps. below 120°. I with 22% oleum for 24 hrs. at 20° gives, after removal of unreacted I, a mixt. contg. 81% α-benzanthronesulfonic acid (II) and 19% β-isomer (III), sepd. as the yellow Ba salts by fractional pptn. of II from cold water. With I and 99.5% H_2SO_4 at 100–70° for 8 hrs. the mixt. of sulfonic acids contains 20% II and 80% III. With 100% H_2SO_4 (IV) under the same conditions appreciable amts. of disulfonic acids are obtained, also isolated as the Ba salts. The Ba salts of both II and III form *quinine salts*, m. 240–2° and 80–2°, resp. Oxidized with $Na_2Cr_2O_7$ in 30% H_2SO_4 both II and III give 1-anthraquinonecarboxylic acid, m. 282–4°. **V. Sulfonation of α-naphthyl phenyl ketone.** I. S. Ioffe and G. Z. Naumova. *Ibid.* 1121–3.—α-$C_{10}H_7COPh$ (V) readily reacts with 95% H_2SO_4 (VI) at 20° to 100° with VI or with oleum at low and high temps. V is completely converted into water-sol. products. When heated with VI at 100–70° for 6 hrs. V is hydrolyzed and sulfonated to give BzOH and $C_{10}H_6(SO_3H)_2$, the latter isolated from the sulfonation mixt. as the Ba salt. To prevent hydrolysis V is sulfonated with 10% oleum at 20° for 24 hrs. to give presumably 1-benzoylnaphthalene-x-sulfonic acid (VII), whose anilide salt, m. 235°, is identical with the compd. obtained by Dziewonski and Mierzwa (*C. A.* 26, 131). With NaOH at 280–320° for 30 min. VII gives α-naphthol, m. 95°. **VI. Sulfonation of 1,2-benzanthraquinone.** I. S. Ioffe and E. N. Kashnitskaya. *Ibid.* 1124–7. Contrary to Graebe (*Ann.* 340, 214 (1905)) 1,2-benzanthraquinone (VIII) is more readily sulfonated than anthraquinone. VIII with VI at 20° is not sulfonated after 15 days but at 100° the sulfonation is practically complete in 6 hrs. IV, as well as weak oleum, completely sulfonate VIII at 20° in several hrs. VIII sulfonated at elevated temp. gives a monosulfonic acid (IX) whose Ba salt, brown, forms a *quinine salt*, brown, m. 118–25°. At low temps. a monosulfonic acid (X) is obtained whose Ba salt, yellow, gives a yellow *quinine salt*, m. 202–5°. Oxidation of IX or X with $KMnO_4$ in acid soln. gives 1,2-anthraquinonedicarboxylic acid, m. 298°, which indicates that in the sulfonation of VIII the sulfo group enters exclusively in the side benzo nucleus.

John Livak

MEL'TEVA, N. N.

USSR/Chemistry - Organic Compounds May 48
Chemistry - Halogenation

"The Action of Bromine and Chlorine on a Glycol of the Diacetylene Series," Yu. S. Zal'kind and N.N. Mel'teva, Lab of Org Chem, Leningrad Technological Inst imeni Lensovet, 10¼ pp

"Zhur Obshch Khim" Vol XVIII (LXXX), No 5

Studies the action of bromine and chlorine on 2, 5-dimethyl-octa-3, 5-diene-2, 7-diol, which produces a comples mixture of products. When they are halogenized by a 10% alkali solution, 3, 4-dichlor and 3 4-dibrom-5-keto-2, 5-dihydrofuran is obtained. Submittes 13 Sep 1947.

PA 8/49T71

MEL'TEVA, N. N.

11 May 52

USSR/Physics - Elastic Elongations of Polymers

"The Problem of Elastic Elongations (Expansions) of Polymers," L. I. Barg, D. M. Spitkovskiy, N. N. Mel'teva, Inst of High-Mol Comnds, Acad Sci USSR

"Dok Ak Nauk SSSR" Vol 84, No 2, pp 257-260

Authors give results of investigations of the magnitude of high-elastic elongations of polyvinyl acetates of various mol wts. Authors state that the purpose of the investigations was to obtain the elasticity characteristics of a group of polymers by way of detg the max value of inverse elongation, which, according to them, was 10 times greater than theoretically possible. Authors conclude that subject phenomenon can be clarified by taking into consideration the mutual influence of interweaving mols not considered in the kinetic theory of high elasticity. Submitted by Acad A. F. Ioffe 19 Mar 52

231T96

MEL'TEVA, N. N.

USSR/Chemistry - Plastics Aug 52

"The Effect of Strain on the Vitrification Temperature of Polymers," E. I. Barg, N. N. Mel'teva, and D. M. Spitkovskiy, Inst of High-Mol Compds Acad Sci USSR

"DAN SSSR" Vol 85, No 5, pp 1061-1064

The vitrification temp (the temp at which vitrified plastic becomes viscoelastic) of polystyrene, polyvinyl acetate, and polyvinyl butyral was studied with respect to its change at varying loads of strain. It was found that there is a linear relationship bet the vitrification temp and the strain. Submitted by Acad A. F. Ioffe 16 May 52.

239T20

MEL'TEVA, M.N.

Chemical Abst.
Vol. 48 No. 8
Apr. 25, 1954
General and Physical Chemistry

Structure of polyvinyl alcohol. B. I. Barg and M. N. Mel'teva. *Doklady Akad. Nauk S.S.S.R.* 92, 30[illegible]. Examn. of the rate of deformation at const. load at various temps. of specimens of polyvinyl alc. (I) formulated with 10% glycerol, polyvinyl acetate, polyvinyl butyral, polystyrene, and pure I indicates that the mech. behavior of I can be explained most simply on the assumption that in I, along with the fundamentally amorphous structure, there exist small areas of cryst. phase, m. 110–50°, that depend on temp. and the temporal conditions of stretching force. I obtained by acidic and alk. hydrolysis of polyvinyl acetate was also examd. After an initial straight-line relation between rate of deformation and temp., there occurs at about 60° (T_c for this polymer) a zigzag curve which indicates alternating acceleration and retardation of stretch, and only at 100–20° does the curve become again substantially straight and very steep. In relaxation of deformation I differs from amorphous polymers in that it has residual deformation of nearly 60%, whereas the amorphous polymers had zero residual deformation. This residue remained even after heating to 150–60°, i.e. near destruction temp. G. M. Kosolapoff

MEL'TEVA, N.N.; LAZAREV, Ye.N.; PAVLOVA, V.F.

Protein substances in cabbage. Report No.1: Amino acid composition of protein substances. Izv.vys.ucheb.zav.; pishch.tekh. no.1: 61-63 '64. (MIRA 17:4)

1. Leningradskiy institut sovetskoy torgovli, kafedra organicheskoy khimii i kafedra prodovol'stvennykh tovarov.

MEL'TEVA, N.N.; SHCHAGINA, L.V.; FREYMAN, A.A.

Protein substances in cabbage. Report No.2: Determining the functional groups of proteins. Izv.vys.ucheb.zav.; pishch.tekh. no.1:63-65 '64. (MIRA 17:4)

1. Leningradskiy institut sovetskoy torgovli, kafedra organicheskoy i fiziko-kolloidnoy khimii.

MEL'TEVA,N.N., REZNICHENKO, M.S.

Investigating the N-Terminal groups of zein in the "Dagestanskaya" corn [with summary in English]. Biokhimiia 23 no.3:372-376 My-Je '58 (MIRA 11:8)

1. Kafedra khimii Leningradskogo instituta sovetskoy torgovli.
(ZEIN)
(THREONINE)
(ASPARTIC ACID)
(GLUTAMIC ACID)

REZNICHENKO, M.S., prof., doktor khim.nauk; MEL'TEVA, N.N., dots., kand.khim. nauk; POLOTNOVA, L.I., dots., kand.biol.nauk

Nature of N-terminal groups of the gliadin of wheat and zein of corn. [Trudy] VNIIZ no.35:85-103 '58. (MIRA 11:10)

1. Laboratoriya kafedry khimii Leningradskogo instituta sovetskoy torgovli.
(Zein) (Gliadin) (Amino acids)

MEL'TEVA, M.N.; REZNICHENKO, M.S.

N-terminal groups of oryzenin isolated from "Zeravshanika" 2586 rice. Biokhimiia 24 no.3:435-440 My-Je '59. (MIRA 12:9)

1. Chair of Chemistry, the Soviet Trade Institute, Leningrad.
(ORYZENIN)

MEL'TEVA, N.N.

Method for simultaneous determination of N-terminal groups and amino acid composition of proteins. Biokhimiia 24 no.4:577-584 Jl-Ag '59. (MIRA 12:11)

1. Kafedra khimii Instituta sovetskoy torgovli im. Fr.Engel'sa, Leningrad.

(PROTEINS chemistry)

MEL'TEVA, N.N.; REZNICHENKO, M.S.; TUKACHINSKIY, S.Ye.; SHCHAGINA, L.V.

Study of terminal and middle amino groups in native and denatured human serum albumin. Biokhimiia 25 no.2:255-261 Mr-Ap '60. (MIRA 14:5)

1. Kafedra khimii Leningradskogo instituta sovetskoy torgovli.
(BLOOD PROTEINS)

MEL'TEVA, N.I., dotsent

Determining the amino acid composition and N-terminal groups by the method of protein dinitrophenylation. Trudy VNIIZ no.38:219-226 '60. (MIRA 15:12)

1. Leningradskiy institut sovetskoy torgovli imeni F.Engel'sa.
(Amino acids) (Paper chromatography)

MEL'TEVA, N.N.

Determining the amino acid composition and N-terminal groups of some proteins in the Viner and Donetskii-650 barley varieties. Biokhimiia 26 no.3:483-488 My-Je '61. (MIRA 14:6)

1. Chair of Chemistry, Institute of Soviet Trade, Leningrad.
(BARLEY) (AMINO ACIDS)

MELYAYEV, N.

Organization of exterior systems under conditions existing in the city of Chardzhou. Uch. zap. Turk. gos. un. no.22: 12-17 '62.

Using waste water for growing agricultural crops. Ibid.:53-56 (MIRA 18:11)

LAZAREV, Ye.N.; MEL'TEVA, N.N.; PAVLOVA, V.

Comparison of new varieties of chromatographic paper in the determination of amino acids and their dinitrophenyl derivatives. Lab. delo no.8:454-456 '64. (MIRA 17:12)

1. Kafedra khimii (zaveduyushchiy - prof. A.V.Markovich) i kafedra prodovol'stvennykh tovarov (zaveduyushchiy - prof. A.M.Malkov) Leningradskogo instituta sovetskoy torgovli im. F.Engel'sa.

MELTONYAN, P. M.: Master Tech Sci (diss) -- "Investigation of the working process of the reels of grain-harvesting machines on inclines". Yerevan, 1959. 19 pp (Armenian Agric Inst, Chair of Agric Machines), 150 copies (KL, No 5, 1959, 150)

SOV/24-59-2-25/30

AUTHORS: Denisova, L. M. and Mel'ts, I. O. (Moscow)

TITLE: Optimal Trajectory of Climbing at a Constant Velocity, Determined from the Fuel Consumption (Ob opredelenii optimal'noy po raskhodu topliva trayektorii nabora vysoty pri postoyannoy skorosti dvizheniya)

PERIODICAL: Izvestiya Akademii nauk SSSR, Otdeleniye tekhnicheskikh nauk, Energetika i avtomatika, 1959, Nr 2, pp 141-143 (USSR)

ABSTRACT: The problem is considered in the plane xoy where the axis x is directed along the force of gravity. The force of the aerodynamic resistance is expressed as Eq (1.1) (figure, p 142). In order to find the solution for $v = const$, the pulling force P is expressed as Eq (2.1) where G - weight of the moving object, Θ - angle between trajectory and horizon. The weight of the object is found from Eq (2.3) where G_o - its initial weight. The expression (2.6) can be derived for the conditions (2.4) and (2.5). The maximum trajectory is determined by the minimum of the functional (2.7). If c is known, then the function of height x, defined as Eq (3.1), can be considered as a known function of the height. When the equation of the extreme trajectory is determined as Eq (3.4), then the functional (2.7) can be written as Eq (3.5) and Eq (2.6) as Eq (3.6).

Card 1/2

Optimal Trajectory of Climbing at a Constant Velocity, Determined From the Fuel Consumption

Thus, it can be shown that the ratio $\Delta G/G_o$ increases with an increase of v for a given $c = c(x)$. The solution in this case can be shown as Eqs (3.7) and (3.8). A very simplified equation for the ratio $\Delta G/G$ can be defined as Eq (5.3) for the conditions (5.4), (5.5) and (5.6) if it is assumed that $cq = \text{const}$ and the density is expressed as Eq (5.1).

SUBMITTED: June 24, 1958.

ACCESSION NR: AP4026948 S/0258/64/004/001/0003/0009

AUTHOR: Mel'ts, I. O. (Moscow)

TITLE: Optimal aerodynamic maneuvering for changes of orbital planes at near-circular speeds

SOURCE: Inzhenerny*y zhurnal, v. 4, no. 1, 1964, 3-9

TOPIC TAGS: aerodynamic maneuvering, flight-path angle, lifting force, lifting vehicle, orbital inclination

ABSTRACT: The variational problem for optimizing the velocity loss during aerodynamic maneuvering at small flight-path angles relative to the local horizontal has been considered. The assumptions used by H. S. London (Change of satellite orbit plane by aerodynamic maneuvering. J. Aeronautical Sci., Paper, No. 61-5 New York, 1961) concerning centrifugal and lifting forces are reiterated, and the three-dimensional equations of motion for a lifting vehicle as a point mass are written. This study is concerned with the optimal laws controlling the angle of attack or lift-to-drag coefficient ratio k and the bank angle. It is assumed that k is known, finite, and a continuous function. The extremum problem is analyzed in three steps:

Card 1/2

ACCESSION NR: AP4026948

optimization condition v_1/v_0 = max (v-flight velocity) and under the same condition with a given value for change of orbital inclination and a given magnitude for y_0, y_1 (y-altitude above earth's surface). It is shown that under equal atmospheric reentry and exit angles there exists for orbital changes during an optimum flight regime a region at almost constant angle of attack and bank angle corresponding to a maximum in the magnitude of k. Closed-form expressions are obtained for a general optimum program for the aerodynamic characteristics as a function of the angle of attack.
"The author is grateful to L. M. Shkadov for discussing the work."
Orig. art. has: 25 equations and 1 figure.

ASSOCIATION: none

SUBMITTED: 11Feb63 DATE ACQ: 15Apr64 ENCL: 00

SUB CODE: AI NO REF SOV: 000 OTHER: 001

Card 2/2

NEL'TSANSKAYA, T. N.

24001 NEL'TSANSKAYA, T. N. Geokhimicheskoye issledovaniye bitumov nekotorykh tipichnykh zakirovannykh (Iz serii rabot" Issledovaniya po khimii prirodnykh asfal'tov" Soobshch 3). Trudy Vsesoyu. Neft. Nauch. - Issled. Geol. razved In-TA, Novaya seriya, Vyp. 26, 1949, S. 23-36. Bibliogr: 16 Nazv.

SO: Letopis, No. 32, 1949.

MEL'TSANSKAYA, T.N.

Dynamics of the extraction of bitumen from rocks. VNIGRI no.105: 107-124 '57. (MIRA 11:9)
(Bitumen) (Extraction (Chemistry))

MEL'TSANSKAYA, T. N., V. A. USPENSKIY and N. S. BEZKROVNYY

"Algarite [Stone-oil, Altered Paraffin] Finds in the Granites of the Lake Baykal Area." p. 443

Geologicheskiy sbornik, 3, (Collection of Articles in Geology, Vol. 3), Leningrad Gostoptekhizdat, 1958, 471pp. (Trudy, vyp 126, Vsesoyuznyy neftyanoy nauchno-issledovatel'skiy geologorazvedochnyy institut)

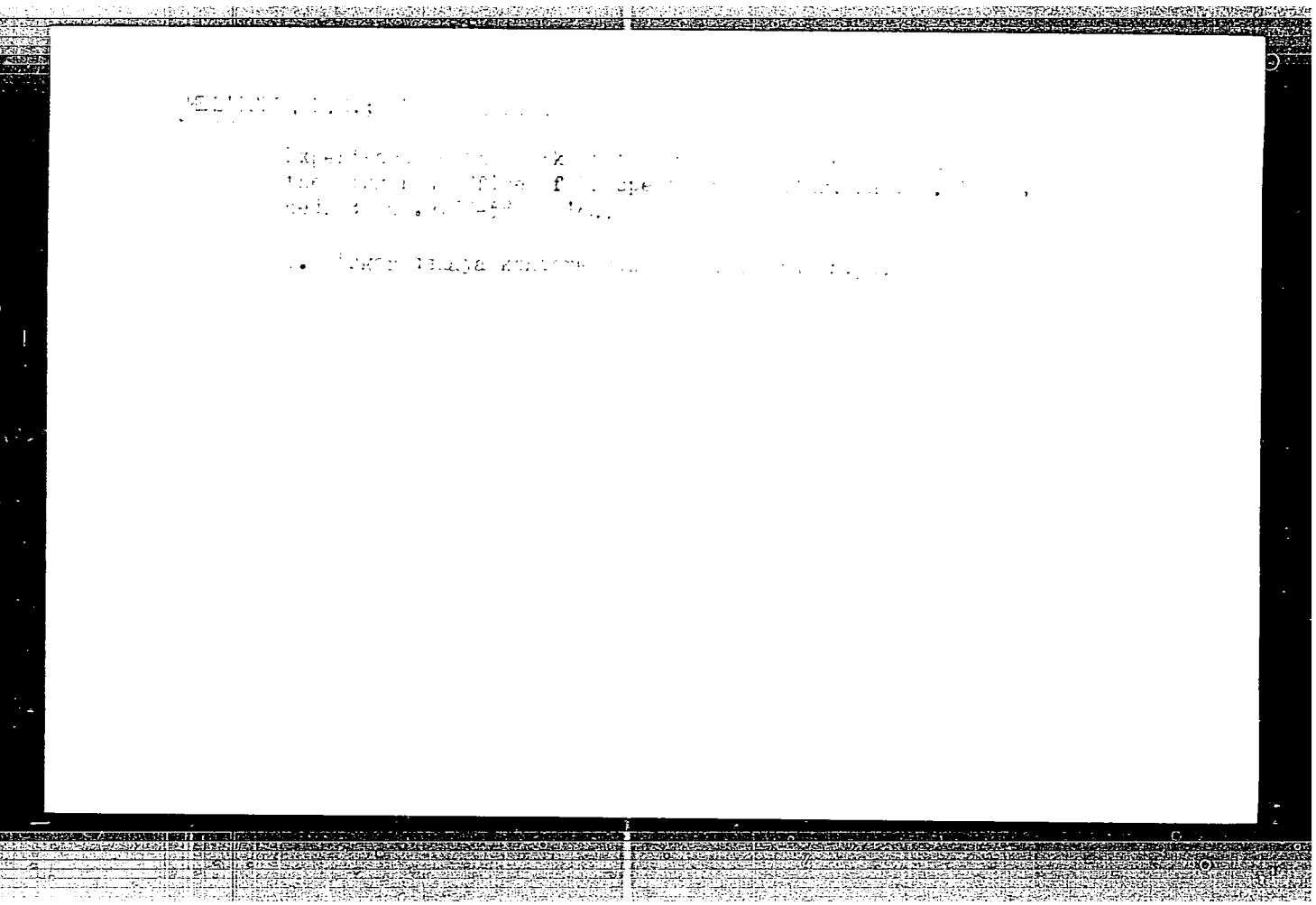
USPENSKIY, V.A.; RADCHENKO, O.A.; GLEBOVSKAYA, Ye.A.; SHISHKOVA, A.P.; MEL'TSANSKAYA, T.N.; INDENBOM, F.B.; Prinimali uchastiye: KOLOTOVA, L.F., khimik; CHAGINA, T.P., tekhnik; BASKINA, T.B., laborant; VIKULINA, M.N., laborant; POLOVNIKOVA, I.A., fizik; PETROV, A.K., tekhnik; PONOMAREV, B.P., laborant; KHYAMYALYAYNIN, L.B., laborant; KLOCHKOV, B.N., laborant; RAGINA, G.M., vedushchiy red.; SAFRONOVA, I.M., tekhn.red.

[Basic processes of the transformation of bitumens in nature and the problems of their classification] Osnovnye puti preobrazovaniia bitumov v prirode i voprosy ikh klassifikatsii. Leningrad, Gos.nauchno-tekhn.izd-vo neft.i gorno-toplivnoi lit-ry Leningr.otd-nie, 1961. 314 p. (Leningrad. Vsesoiuznyi nauchno-issledovatel'skii geologorazvedochnyi institut. Trudy, no.185). (MIRA 15:4)

(Bitumen--Geology)

USPENSKIY, V.A.; RADCHENKO, O.A.; GLEBOVSKAYA, Ye.A.; GORSKAYA, A.I.; SHISHKOVA, A.P.; PARPAROVA, G.M.; KOLOTOVA, L.F.; MEL'TSANSKAYA, T.N.; NERUCHEV, S.G., red.

[Principles of the genetic classification of bitumens]. Osnovy geneticheskoi klassifikatsii bitumov. Leningrad, Nedra, 1964. 266 p. (Leningrad, Vsesoiuznyi neftianoi naychno-issledovatel'skii geologorazvedochnyi institut. Trudy. no.230).
(MIRA 17:7)



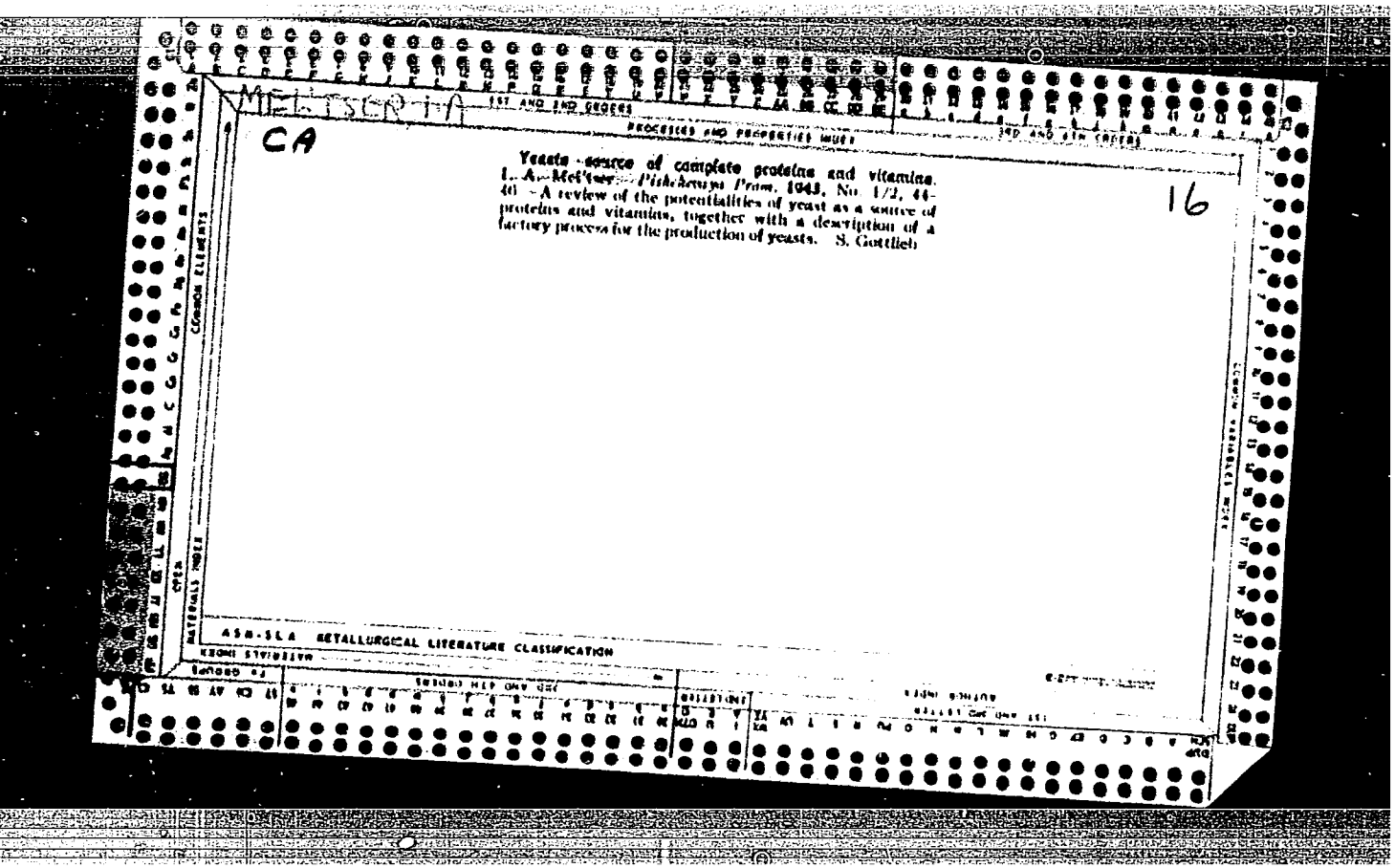
MEL'TSER, B.S.; SMIRNOV, B.S.

Introducing progresaive work methods into the Mirgorod Test Drilling Office of the Petroleum and Gas Prospecting Trust of Poltava Province. Razved. i okh.nedr 31 no.4:53-54 Ap '65. (MIRA 19:1)

1. Mirgorodskaya kontora razvedochnogo bureniya.

KURKO, V.I., kand. tekhn. nauk; KEL'MAN, L.F., inzh.-khimik;
MEL'TSER, F.R., inzh.-khimik; KUZNETSOVA, A.A., laborant

Comparative phenol characteristics of smoking preparations and uncooked smoked sausage. Trudy VNIIMP no.16:211-220 '64.
(MIRA 18:11)



PALAGINA, N.K.; MEL'TSER, I.A., spetsred.; VASIL'YEVA, O.N., red.; YAROV, E.M., tekhn.red.

[Purifying and clarifying molasses in clarifiers; work practices of the Leningrad Yeast Plant] Ochistka i osvetlenie melassy na klarifikatorakh; opyt raboty Leningradskogo drozhzhevogo zavoda. Moskva, Pishchepromizdat, 1956. 30 p. (MIRA 12:5)
(Molasses) (Yeast)

MEL'TSEV, I.A.

Use of ion exchange in the yeast industry for the improvement of molasses composition. Khleb. i kond. prom. 1 no.3:21-24 Mr '57. (MLRA 10:4)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut khlebopekarnoy promyshlennosti.

(Molasses) (Ion exchange) (Yeast)

MEL'TSER, I.A.

Semicontinuous method for the production of baker's yeast.
I.A. Mel'tser (from "Die Branntweinwirtschaft," no. 12, 1956).
Khleb. i kond. prom. 1 no.4:46-47 Ap '57. (MLRA 10:5)
(Czechoslovakia--Yeast)

MEL'TSER, I.A.

Salt solutions for removing water from yeast cells (from "Die Brantweinwirtschaft," no.15 1956). Khleb.i kond.prom. 1 no.6:46-47 Je '57. (MLRA 10:8)

(Austria--Yeast) (Salts)

MEL'TSER, I.A.

USSR/Chemical Technology - Chemical Products and Their Application. Fermentation Industry. I-12

Abs Jour : Ref Zhur - Khimiya, No 1, 1958, 2813

Author : Mel'tser, I.A., Kuramshin, Yu.N., Lozenko, M.F.
Inst :
Title : Results of the Growing of Yeast in Yeast-Growing Apparatus Provided with Stationary and Revolving Air-Distributing Systems

Orig Pub : Khlebopek. i konditersk. prom-st', 1957, No 7, 22-24

Abstract : Accretion of yeast at different degrees of aeration increases on increase of the air supply from 5 to 20 m^3/hour. Further increase of the aeration results in a decrease of the yields of yeast.

Card 1/1

MEL'TSER, I.A.

Using ozonized water for the production of yeast. Khleb.i kond.prom. 1 no.8:44 Ag '57. (MLRA 10:8)
(Yeast) (Water)

MEL'TSER, I.A.

Development of the yeast industry in the U.S.S.R. Khleb. i kond. prom. 1 no.12:19-20 D '57. (MIRA 11:1)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut khlebopekarnoy promyshlennosti.

(Yeast)

MEL'TSER, I.A.

Internal composition of the yeast cell (from "Die Brauwelt," no.45/46 1955). Khleb. i kond. prom. 1 no.12:41-42 D '57.
(Yeast) (MIRA 11:1)

ITSKOVICH, Ya.S.; SHPIGEL'GLYAS, A.S.; MEL'TSER, I.A.; KURAMSHIN, Yu.N.

Apparatus of TsNIIKHP-L-1-58 make for the inspection of baker's yeast quality. Trudy TSNIIKHP no.8:35-36 '60. (MIRA 15:8)
(Yeast--Testing) (Bakers and bakeries--Equipment and supplies)

MEL'TSER, I.A.; KURAMSHIN, Yu.N.; Prinimali uchastiye: LOZENKO, M.F.; CHULINA, Ye.P.; BELOVA, L.D.

New types of foam fire extinguishers for yeast plants. Trudy TSNIIKHP no.8:169-172 '60. (MIRA 15:8)
(Fire extinction--Chemical systems)

MEL'TSER, I.A.; LOZENKO, M.F.; CHULINA, Ye.P.; BELOVA, L.D.

Searching for more effective methods of anticorrosion coating of yeast growing apparatus. Trudy TSNIIKHP no.8:172-174 '60. (MIRA 15:8)

(Protective coatings) (Fermentation--Apparatus and supplies)

MEL'TSER, I. I.

Distr: 4E4j

Influence of calcination on the spectrum of local levels of energy of the luminophor ZnS-Cu. M. L. Kats and I. I. Mel'tser. *Uchenye Zapiski Saratov. Univ.*, 40, 121-6 (1954). *Referat. zhur.; Khim.* 1956, Abstr. No. 15412.—The influence of heat-treatment on the spectrum of local levels in phosphorescent ZnS-Cu was investigated by the method of thermoluminescence curves in the interval 90-375°K. In phosphors calcined at 700-800° (sphalerite-type lattice) and excited at 90°K., there can be noticed in addn. to the low-temp. peak almost at the temp. of liquid O, a 2nd peak at 207°K. With high-temp. calcination (900-1100°), wurtzite-type lattice in addn. to the 1st and 2nd, slightly displaced, peak (at 237°K.), a 3rd peak can be observed at 290°K. As the calcination temp. increases from 900 to 1100°C., the spectrum of local levels remains unchanged, but their no. and the total luminosity increase. The total luminosity of phosphors excited at room temp. and then quickly cooled is different for wurtzite and sphalerite. In the 1st case a peak at 288°K. can be noticed during thermoluminescence; the intensity of this peak increases with increasing calcination temp. In the 2nd case, samples have only a slight luminescence since, unlike the high-temp. form, they are lacking the 3rd, lowest group of local levels. By using the method proposed by V. V. Antonov-Romanovskii (*C.A.* 41, 4038*h* (page reference incorrect in *C.A.*; should be 477)), the authors have calcd. the depth of localization levels, corresponding to the 2nd peak of thermoluminescence in phosphors calcined at various temps. In the interval 700-1100°C. it increases from 0.21 to 0.28 e.v. and the total luminosity increases from 455 to 1425. The luminescence spectrum does not depend on the temp. of calcination. J. Mleszewska

4
1
1/1

MELTSER, L.A.

Meltzer, L. A. On the correct statement of Goursat's problem. Rec. Math. [Mat. Sbornik] N.S. 18(60), 59–104 (1946). (Russian. English summary) [MF 16677]

A systematic study is given of conditions under which the problem of Goursat for the system

$$(1)\qquad \sum_{i=1}^{l+m} f_{ji}(x, y)\partial u_i/\partial x + \sum_{i=1}^{l+m} \phi_{ji}(x, y)\partial u_i/\partial y = \Phi_j,$$

$j=1, \cdots, l+m$; Φ_j depending on $x, y, u_1, \cdots, u_{l+m}$, is correctly stated in a bounded domain D, situated in the first quadrant so that the boundary of D contains the segments $0 \leqq x \leqq a$, $0 \leqq y \leqq b$; that is, conditions are given under which one has the following. (A) For every set of continuous and continuously differentiable bounded $\psi_\lambda(x)$ ($\lambda \leqq l$ on $(0, a)$), $\psi_\mu(y)$ ($l < \mu \leqq l+m$ on $(0, b)$) there exists just one set u_i (the u_i and their first order derivatives continuous in D), satisfying (1) and the relations $u_\lambda = \psi_\lambda(x)$ for $y=0$ (x on $(0, a)$; $\lambda \leqq l$), $u_\mu = \psi_\mu(y)$ for $x=0$ (y on $(0, b)$; $l < \mu \leqq l+m$). (B) Arbitrarily small variations in $\psi_\lambda, \psi_\mu^{(1)}$ result in arbitrarily small variations in the u_i. *W. J. Trjitzinsky* (Urbana, Ill.).

Source: Mathematical Reviews, Vol 8, No. 2

1. MARTYNOVSKIY, Prof. V. and MEL'TSER, L.

2. USSR (600)

4. Refrigeration and Refrigerating Machinery

7. Refrigerating effect of an eddy pipe. Khol.tekh. 29 no. 4, 1952.

9. Monthly Lists of Russian Accessions, Library of Congress, March 1953, Unclassified.

MEL'TSER, L.; ALEKSEYEV, V.

The Philips gas refrigeration machine. Khol.tekh.32 no.4:31-37 O-D '55. (MIRA 9:4)
(Netherlands--Refrigeration and refrigerating machinery)

MARTYNOVSKIY, V., professor; MEL'TSER, L., dotsent

Degree of thermodynamic efficiency of heat-transfer and refrigerating equipment. Khol.tekh. 32 no.1:42-44 Ja-Mr '55. (MLRA 8:7)
(Thermodynamics)

MEL'TSER, L.

FILIPPOV, P.; MEL'TSER, L.; MINKUS, B.

Using knurled pipes in ammonia condensers. Khol.tekh. 32 no.2: 42-44 Ap-Je '55. (MLRA 8:10)
(Condensers (Vapors and gases))

MARTYNOVSKIY,V., doktor tekhnicheskikh nauk, professor; MEL'TSER,L., kandidat tekhnicheskikh nauk

Temperature limits in the efficient use of compressed air refrigerators. Khol.tekh.32 no.2:50-53 Ap-Je '55. (MLRA 8:10)
(Refrigeration and refrigerating machinery)

MEL'TSER, L., kandidat tekhnicheskikh nauk.

Design of freon piston compressors. Khol.tekh.33 no.3:50-54 Jl-S '56. (Compressors) (MLRA 9:10)

AUTHOR: Mel'tser, L., Candidate of Technical Sciences. 66-1-12/26

TITLE: Features of the regenerative cycle of a freon operated machine. (Osobennosti regenerativnogo tsikla freonovoy mashiny).

PERIODICAL: "Kholodil'naya Tekhnika" (Refrigeration Engineering), 1957, No.1, pp.37-39 (U.S.S.R.)

ABSTRACT: The author has shown in earlier work (1,2) that in view of that fact that refrigeration machinery operates with oil circulation in the system, it is necessary to consider in the calculations the effect of the solubility of freon in oil. For improving the operation of the machines and automatic control by instruments it is also necessary to consider the features introduced as a result of the circulating oil. A characteristic feature of the oil-freon solution is an increase in the boiling temperature at a constant pressure and increased oil concentration. Application of a regenerative heat exchanger enables to conserve a practically constant boiling temperature with a reduced range of degassing in the evaporator without reducing appreciably the useful cooling capacity of the agent. Of particular interest is the influence of the oil on the specific cooling capacity q_v of the oil-freon

Card 1/3

Features of the regenerative cycle of a freon operated machine. (Cont.)

66-1-12/26

mixture; the graph, Fig.1, shows the results of calculations of q_v as a function of the mixture concentration and the final evaporation temperature for an initial boiling temperature of -25 C and a condensation temperature of 30 C and it can be seen that the influence of the concentration of the solution is very considerable in the case of small over-heating in the evaporator. The possible degree of regeneration depends on the oil concentration in the freon in front of the regulator; even in the case of small oil concentrations it is possible to materialise full super-cooling of the liquid to the initial boiling temperature. For an equal degree of super-cooling of the liquid the temperature of the steam flowing out of the regenerator is lower than in the case of operation with a pure cooling agent. For calculating this temperature it is necessary to start off with the initial concentration of the solution and the permissible maximum evaporation temperature. It is necessary to consider the favourable influence of regeneration on the operating characteristics of the compressor and on the magnitude of the theoretical volume cooling capacity. The author recommends use of

Card 2/3

Features of the regenerative cycle of a freon operated mechine. (Cont.) 66-1-12/26

regenerative heat exchange for Soviet machines of the type ФАК produced by Mekhanolit.
There are three figures and 3 references, 2 of which are Slavic.

AVAILABLE:

Card 3/3

Mel'tser, L.

USSR/General Problems. Methodology. History. Scientific Institutions and Conferences. Instruction. Questions Concerning Bibliography and Scientific Documentation A

Abs Jour : Ref Zhur-Khimiya, No 3, 1958, 6837

Author : A. Mal'skiy, V. Chaykovskiy, L. Mel'tser, S. Chuklin

Inst : Odessa Technological Institute of Food and Refrigeration Industries

Title : Odessa Technological Institute of Food and Refrigeration Industries

Orig Pub : Kholodil'naya tekhnika, 1957, No 3, 32-34

Abstract : To the 40th anniversary of the Great October Socialist Revolution. A general review of tuition and scientific activities.

Card 1/1

KUZNETSOV, A.; LIKHNITSKIY, G.; MEL'TSER, L.

Operating 4-cylinder compressor for double-stage compression. (MIRA 11:7)
Khol. tekh. 35 no. 3:54-55 My-Je '58.
(Compressors)

14(1) SOV/66-59-2-29/31

AUTHORS: Zhadan, S., Mel'tser, L.

TITLE: Adjustment of Capacity and Cold Production of a Compressor (Regulirovaniye moshchnosti i kholodoproizvoditel'nosti kompressora)

PERIODICAL: Kholodil'naya tekhnika, 1959, Nr 2, pp 76-78 (USSR)

ABSTRACT: The article refers to 2 foreign proposals: one aims at maintaining constant capacity of the compressor at variable temperature of condensation (William L. McGrath), "Electrical Demand in AC Equipment", "Refrigerating Engineering", 1957, Nr 2). In accordance with the other proposal it appears to be possible to maintain constant either the cold-producing capacity of the installation, or the power which it consumes at a variable temperature of evaporation ("Refrigeration Capacity", "Modern Refrigeration", 1957, Nr 8, p 342).
There are 2 graphs and 1 schematic diagram.

Card 1/1

MELTTSER, L.

14(1) SOV/66-59-5-3/35

AUTHORS: Mel'tser, L., Candidate of Technical Sciences, Karavanskiy, I., Engineer

TITLE: Investigation of the Ideal Cycle of the Philips Machine by Applying Thermodynamics of the Variable Gas Quantity

PERIODICAL: Kholodil'naya tekhnika, 1959, Nr 5, pp 13-17 (USSR)

ABSTRACT: The high efficiency of the Philips machine attaining temperatures of -80 to -180°C and its original construction has attracted great attention. The object of this article is to propose a new method of calculating the cycle of the gas regenerating machine of the Philips type. The investigation of the author is based on the thermodynamics of variable gas quantity, the principles of which were laid down by M.A. Mamontov [Ref 3] whose method of calculation not only permits to arrive at new results, but conveys also a more complete picture of the processes taking place in the machine. This makes it possible to determine the true heat loads of the refrigerator, of the refrigerating head and of the regenerator, which is not possible with any other known methods of calculation, in particular those of Köhler and Yonkers and

Card 1/3

Investigation of the Ideal Cycle of the Philips Machine by Applying Thermodynamics of the Variable Gas Quantity

of Kodegone [Ref 1 and 2] which methods the author briefly describes in the article. The author agrees with the conclusion at which Kodegone arrives, excepting that it refers to one particular case only, while the method proposed by the author permits to determine all values of the heat loads of the regenerator. From the graphs shown in the article it follows that for the cycle of the machine, taken as a basis for the calculation, the most favorable value of w lies between 2 and 3, w being the ratio of the maximum working volume of the hot space to the maximum working volume of the cold space.
There are 2 diagrams, 7 sets of graphs and 3 references, of which 1 is English and 2 are Soviet.

ASSOCIATION: Odesskiy tekhnologicheskiy institut pishchevoy i kholodil'noy

Investigation of the Ideal Cycle of the Philips Machine by Applying Thermodynamics of the Variable Gas Quantity

promyshlennosti (Odessa Technological Institute of Food and Refrigeration Industries).

MEL'TSER, L. V.

Akademiya nauk SSSR. Institut avtomatiki i telemekhaniki

Avtomatika i telemekhanika; sbornik (Automation and Telemechanics; Collection of Articles) Moscow, 1958. 144 p. 5,000 copies printed

Resp. Ed.: Ya.Z. Tsypkin; Ed. of Publishing House: V.A. Kotov; Tech. Ed: I.N. Guseva

PURPOSE: This collection of articles is intended for specialists in automation and remote control.

COVERAGE: The book contains fifteen papers presented at the fourth and fifth scientific and technical conferences, held in 1955 and 1956, by junior members of the staff of the Institut avtomatiki i telemekhaniki (Institute of Automation and Telemechanics), Academy of Sciences, USSR. The papers are based on the individual research of their authors. The collection consists of five parts: Automatic Control, Components of Automatic and Remote Control Systems, Automated Electric Drive, Automatic Checking, and Remote Control.

Petelin, D.P. Mechanical Transient Processes of a Synchronous Motor With Frequency Control 74

The author investigates the qualitative and quantitative characteristics of mechanical transients in synchronous motors with frequency control for conditions of starting, braking and speed regulation. In analyzing the processes of starting synchronous motors by means of changing the frequency of the a-c supply from zero, the process of starting at reduced frequencies and the process of motor acceleration by a smooth change of frequency were investigated separately. It was found that synchronous acceleration and braking depend on the rate of frequency change. The author forms equations and makes an analysis of the free transient process of a synchronous generator-synchronous motor system. There are 11 references: 6 Soviet, 4 English and 1 German. No personalities are mentioned.

AUTOMATIC CHECKING

Mel'tser, L.V. Selection of Operating Conditions of a Phase Ionization Flowmeter 86

The author compares two kinds of ionization flowmeters, a pulse flowmeter and a phase flowmeter, both of which he describes in detail. He finds the latter to be more sensitive to current than the first because of the use of narrow-band amplifiers. In addition, a longer radiation time (trad) is usually selected for the phase flowmeter than for the pulse flowmeter, which contributes to better utilization of radiation. There are 5 references: 4 Soviet and 1 English. No personalities are mentioned.

Stakhovkiy, R.I. Causes of Instability of Gas Currents in an Analytical Mass Spectrometer and a Method of Periodic Automatic Calibration 91

The author presents experimental results of the practical application of periodic calibration in an experimental mass-spectrometer gas analyzer developed jointly by IAT and the Vsesoyuznyy nauchno-issledovatel'skiy i proyektnyy institut podzemnoy gazifikatsii ugley Ministerstva uglevoy promyshlennosti SSSR (All Union Scientific Research and Design Institute for the Underground Gasification of Coal, Ministry of the Coal Industry, USSR). Work on automatic calibration was begun at IAT in 1951 and is now being conducted in the USSR with good results but on a limited scale. The author also describes experiments on the quantitative determination of the effect of secondary electron emmission in the ionization chamber on gas current. The method of automatic periodic calibration is one of the measures used to increase the accuracy of mass-spectrometer gas analyzers, and the author recommends its application for industrial gas analyzers of this type. There are 8 references: 4 Soviet, 3 English and 1 German.

SHUMILOVSKIY, N.N., prof., doktor tekhn.nauk; MEL'TSER, L.V., kand.tekhn. nauk

Designing measuring systems in radioactive devices for the automatic control of the composition of the substance. Izv.vys. ucheb.zav.; prib. no.4:137-148 '59. (MIRA 13:5)

1. Moskovskiy energeticheskiy institut, Institut avtomatiki i telemekhaniki AN SSSR. Rekomendovana orgkomitetom mezhvuzovskoy konferentsii po elektroizmeritel'nym priboram i tekhnicheskim sredstvam avtomatiki.
(Radioactive substances--Industrial application)

SHUMILOVSKIY, N.N.; MEL'TTSER, L.V.

Use of modulated radioactive radiation for measuring the consumption and the speed of a gas. Nauch. zap. LPI no.1:188-198 '61. (MIRA 16:6)

(Radioactive substances--Industrial applications)

SHUMILOVSKIY, Nikolay Nikolayevich; MEL'TSER, Iel' Vladimirovich; KALMAKOV, Andrey Alekseyevich; TENYAYEV, V.G., red.

[Radioisotope methods for the automatic control of the composition of complex media] Radioizotopnye metody avtomaticheskogo kontrolia sostava slozhnykh sred. Moskva, Energiia, 1964. 63 p. (Biblioteka po avtomatike, no.113) (MIRA 17:12)

MEL'TSER, LEONID ZINOV'YEVICH.

Epr.
.B92385

Kholdil'nyye mashiny i ustanovki dlya sel'skogo khozyaystva by L. Z. Mel'tser i V. F. Chaykovskiy. Kiyev, Mashgiz, 1956.
103 P. diagrs., tables.

MEL'TSER, L.Z., kand.tekhn.nauk, dotsent; SHIDLOVSKAYA, V.P., inzh.

Regenerative cycle of a freon piston refrigerating machine.
Trudy OTIP i KHP 8 no.1:23-31 '57. (MIRA 12:8)

1. Kafedra kholodil'nykh mashin Odesskogo tekhnologicheskogo instituta pishchevoy i kholodil'noy promyshlennosti.
(Refrigeration and refrigerating machinery)

MEL'TSER, L. Z., KARAVANSKIY, I. I.

"Thermodynamic Investigations of the Working Cycle of the Philips Machine."

Report submitted for the 10th Intl. Refrigeration Congress, Copenhagen. 19 August - 2 September 1959.

ZHADAN, S.; MEL'TSER, L.Z.

Controlling the power requirement and refrigerating capacity of a compressor. Khol. tekh. 36 no.2:77-78 Mr-Ap '59. (MIRA 12:8)

(Compressors) (Automatic control)

CHULKIN, Sergey Grigor'yevich, doktor tekhn. nauk, prof.; MARTYNOVSKIY, Vladimir Sergeyevich, doktor tekhn. nauk, prof.; MEL'TSER, Leonid Zinov'yevich, kand. tekhn. nauk, dots.; Prinimali uchastiye: ALEKSEYEV, V.P., kand. tekhn. nauk, dots.; FILIPPOV, P.K., dots.; CHICHKOV, N.V., red.; BRODSKIY, M.P., tekhn. red.

[Refrigerating units] Kholodil'nye ustanovki. Moskva, Gos. izd-vo torg. lit-ry, 1961. 472 p. (MIRA 14:12)
(Refrigeration and refrigerating machinery)

MARTYNOVSKIY, V.S., doktor tekhn.nauk, prof.; MEL'TSER, L.Z., kand.tekhn. nauk; SHNAYD, I.M., inzh.

Energy efficiency of different types of cold generators. Khol. tekh. 38 no.6:11-16 N-D '61. (MIRA 15:1)

1. Odesskiy tekhnologicheskiy institut pishchevoy i kholodil'noy promyshlennosti.
(Refregeration and refrigerating machinery)

MEL'TSER, L.Z., kand. tekhn. nauk; SRINIVASAN, R.V., inzh.

Using the enthalpy-exergy diagram for thermodynamic calculations; concerning V.M. Borodianskii and I.P. Ishkin's article. Khol. tekh. 39 no.5:63-65 S-O '62. (MIRA 16:7)

(Thermodynamics--Tables, calculations, etc.)
(Refrigeration and refrigerating machinery)
(Borodianskii, V.M.) (Ishkin, I.P.)

MEL'TSER, Leonid Zinov'yevich, kand.tekhn.nauk; VEYNBERG, B.S., kand. tekhn.nauk, dotsent, retsenzent; MASLOVA, Ye.F., red.; MAMONTOVA, N.N., tekhn.red.

[Lubrication of freon refrigerating machines] Smazka freonovykh kholodil'nykh mashin. Leningrad, Gostorgizdat, 1962. 97 p. (MIRA 15:5)
(Refrigeration and refrigerating machinery—Lubrication)

MEL'TSER, L.Z., kand.tekhn.nauk; VIKHOREV, G.A., inzh.; KOMISSARENKO, V.A., inzh.; SRINIVASAN, R.V.

Experimental study of a two-stage compressor with a 1 : 1 ratio of the stage volumes. Khol.tekh. 40 no.5:23-27 S-O '63. (MIRA 16:11)

1. Odesskiy tekhnologicheskiy institut pishchevoy i kholodil'noy promyshlennosti.

IL'CHENKO, S.G., otv. red.; CHUKLIN, S.G., zam. otv. red.; RYZHENKO, L.P., red.; BADYL'KES, I.S., red.; ALEKSEYEV, V.I., red.; VEYNBERG, B.S., red.; GOGOLIN, A.A., red.; NEL'SEN, L.Z., red.; ZHADAN, S.Z., red.; NAYER, V.A., red.; MINKUS, B.A., red.; BARENBOYM, A.B., red.; NIKUL'SHINA, L.G., red.

[Transactions of the Conference on the Outlook for the Development and Introduction of Refrigerating Equipment into the National Economy of the U.S.S.R.] Trudy Konferentsii po perspektivam razvitiia i vnedreniia kholodil'noi tekhniki v narodnoe khoziaistvo SSSR. Moskva, Gostorgizdat, 1963. 262 p. (MIRA 18:3)

1. Konferentsiya po perspektivam razvitiya i vnedreniya kholodil'nov tekhniki v narodnoye khozyaystvo SSSR. Odessa, 196[illegible]. 2 Odesskiy tekhnologicheskiy institut pishchevoy i kholodnoy promyshlennosti (for Minkus, Barenboym, Chuklin, Nikul'shina, Zhadan). 3. Vsesoyuznyy nauchno-issledovatel'skiy institut kholodil'noy promyshlennosti (for Gogolin, Badyl'kes).

MEL'TSER, L.Z., kand.tekhn.nauk; DREMLYUKH, T.S.; SEMENYUK, V.A.

Experimental study of the properties of the mixtures of Freon 22 with lubricants. Khol.tekh. 42 no.2:33-36 Mr-Ap '65. (MIRA 18:5)

1. Odesskiy tekhnologicheskiy institut pishchevoy i kholodil'noy promyshlennosti.