KALEYS, O. Yu. [Kalejs,O.]; PAKALNS, D.A.

Use of tropeolin OO for photocolorimetric determination of belladonna extract in drug mixtures. Apt. delo 11 no.6: 66-69 N-D'62 (MIRA 17:7)

1. Kontrol'no-analiticheskaya laboratoriya Glavnogo aptechnogo upravleniya Latviyskoy SSR.

PAKALNS, G.Yu., assistent

Morphological changes in the parodontium under the action of the edge of artificial dental crowns. Stomatologiia 40 no.2:77-82 Mr-Ap '61. (MIRA 14:5)

1. Iz kafedry ortopedicheskoy stomatologii (zav. - prof. D.A. Kalvelis) Rizhskogo meditsinskogo instituta (direktor - prof. V.A.Kal'berg).

(GUMS--DISEASES) (DENTAL PROSTHESIS--PHYSIOLOGICAL EFFECT)

PAKALNS, G. Yu.

On the structure of the gingival pocket. Vestis Latv ak no.12: 121-128 '60. (KRAI 10:9)

(TEETH) (GUMS)

PAKALNS, G. Yu.

Cand Med Sci - (diss) "Morphology of the gum pocket and changes of it under the action of the edge of artificial tooth crowns." Riga, 1961. 18 pp; (Academy of Sciences Latvian SSR, Inst of Experimental and Clinical Medicine); 250 copies; price not given; (KL, 10-61 sup, 226)

PENTSIK, A.S., prof.; LISITSA, F.M., dotsent; PAKALNSH, N.P. (Praga)

Experience in vaccination against poliomyelitis with live attenuated vaccine. Klin.med. 38 no.9:48-54 S '60. (MIRA 13:11)
(POLIOMYELITIS)

MUTSENIYEK, A.Ya.[Mucenieks, A.]; PAKALNYN', N.P.[Pakalnins, N.]; PARAMONOVA, V., red.

[Coxsackie and ECHO virus neuroinfections] Virusnye neiro-infektsii Koksaki i ECHO. Riga, Izd-vo AN Latviiskoi SSR, 1964. 128 p. (MIRA 18:1)

LUPTAK,I.; PAKAN, J.; HANDZO, I.

Contribution to the study of changes in cholinesterase in the course of labor. Bratisl. lek. listy 1 no.11:655-659 '64

1. II. gyn. - por. klinika Lek. fak. University Komenskeho v Bratislave; vedúci: doc. MUDr. A. Hudcovic.

BRUCHAC,D. (Bratislava, ~~Sulekova ul. 16~~);HANDZO,I.; PAKAN, J.; VIERIK,J.

Our experiences with the colorimetric determination of blood cholinesterase. Cesk. gynek. 30 no.1:106-110 Mr'65.

1. II. gyn.-por. klinika Lekarske fakulty University Karlovy v Bratislave (prednosta: doc. dr. A. Hudcovic).

BRUCHAC, D. doc., CSc.; PAKAN, J.

The effect of cesarean section on perinatal mortality. Cesk. gyn. 27[41] no.4:286-290 My '62.

1. II. gyn. por. klin. UK v Bratislave, prednosta doc. MUDr. A.Hudcovic.

(CESAREAN SECTION) (INFANT MORTALITY)

PAKAN, J.; HANDZO, I.

Some changes in the weight of internal organs of rats during the hyperemia test in relation to the intradermal toxoplasmin test in pregnant women. Bratisl. lek. listy 45 no.9:543-554 15 N '65.

1. Katedra gynekologie a porodnictva II Lekarske fakulty Univerzity Komenskeho v Bratislave (veduci doc. MUDr. A. Hudcovic).

PAKAN, Jozef; HANDZO, Ivan; CATAR, Gustav.

Some factors of the internal environment in acute experimental toxoplasmosis. Biologia (Bratisl.) 19 no.4:245-256 '64.

1. Cathedra of the 2nd Clinic for Gynaecology and Obstetrics, Komensky University, Faculty of Medicine, and Research Laboratory for Parasitology, Cathedra for General Biology, Komensky University, Faculty of Medicine, Bratislava.

PAKAN, M.

Dust removal in gas-cooled reactors. Jaderna energie 6 no.4:
136-138 Ap '60.

5 (3)
AUTHORS: Sadykov, A. S., Pakanayev, Ya. I. SOV/79-29-7-74 8?

TITLE: Separation of the Alkaloids of Sophora Pachycarpa (Razdeleniye alkaloidov sofory tolstoplodnoy)

PERIODICAL: Zhurnal obshchey khimii, 1959, Vol 29, Nr 7, pp 2439-2441 (USSR)

ABSTRACT: In the manufacture of pachycarpine there is a large surplus of high-boiling alkaloids from the Sophora pachycarpa in a chemical-pharmaceutical factory, from among which the well-known alkaloids matrine and sophocarpine are of interest as initial products for many syntheses. In the present paper a method of separating this alkaloid mixture left over in the manufacture as distillation residue, which was devised by the authors, is described. This residue consists of a dark-brown mass soluble in water and organic solvents and contains 8-10 % kerosene and moisture. After extraction and vacuum distillation it is possible to obtain fractions containing a mixture of matrine and sophocarpine; a difficultly distillable residue (about 40 %) is left over. For the separation of this mixture its different behavior with respect to caustic potash was made use of. When treated with alkaline caustic potash solution matrine forms a potassium salt of the matrinic acid, whereas sophocarpine is not affected.

Card 1/2

Separation of the Alkaloids of Sophora Pachycarpa SOV/79-29-7-74/87

From the potassium salt of the matrinic acid matrine can be obtained by means of acetic anhydride. It was further possible to separate the above-mentioned mixture on the basis of the different solubility of the N-oxides of both alkaloids. These N-oxides are formed if the mixture of the bases is treated with hydrogen peroxide. The N-oxide of sophocarpine has hitherto been unknown; it melts at 68-69°, its picrate at 78-80°. There are 5 references, 3 of which are Soviet.

ASSOCIATION: Sredneaziatskiy gosudarstvennyy universitet i Bukharskiy pedagogicheskiy institut ([Soviet] Central Asia State University and Bukhara Pedagogical Institute)

SUBMITTED: May 21, 1958

Card 2/2

5 (3)

AUTHORS: Sadykov, A. S., Pakanayev, Ya. I. SOV/79-29-7-78/83

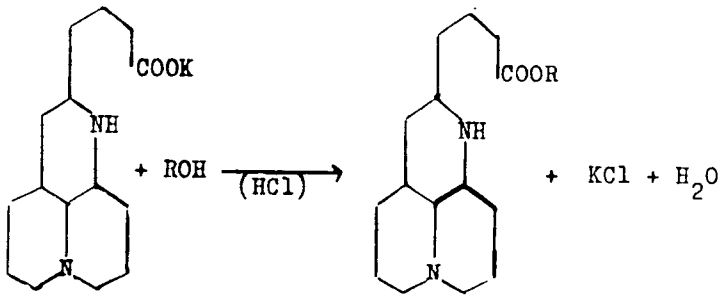
TITLE: Investigation of the Alkaloids of the Series C_{15} (Izucheniye alkaloidov ryada C_{15}). II. Esters of the Matrinic Acid (II. O slozhnykh efirakh matrinovoy kisloty)

PERIODICAL: Zhurnal obshchey khimii, 1959, Vol 29, Nr 7, pp 2452-2453 (USSR)

ABSTRACT: In earlier reports (Ref 1) new methods were described of separating matrine and N-matrine oxide from the distillation residues in the industrial manufacture of pachycarpine in the Chimkentskiy khimikofarmatsevticheskiy zavod (Chimkent Chemico-pharmaceutical Works). Reports were also made on the "sophocarpinols". The present paper gives the results of the synthesis of the matrinic acid esters on the basis of the potassium salt of the matrinic acid and the corresponding alcohols:

Card 1/3

Investigation of the Alkaloids of the Series C_{15}. SOV/79-29-7-78/83
II. Esters of the Matrinic Acid



The reaction was carried out by letting through dry hydrogen chloride in the solution of the potassium salt of the matrinic acid in the corresponding alcohol (Ref 2). The unreacted alcohol was distilled off, the residue weakly alkalized with 35 % sodium solution and extracted with ether. After distillation of the solvent the esters of the matrinic acid were obtained in crystalline condition in the residue. In this way the following esters were synthesized: methyl, ethyl, propyl,

Card 2/3

Investigation of the Alakloids of the Series C_{15}. SOV/79-29-7-78/83
II. Esters of the Matrinic Acid

isopropyl, butyl, isobutyl, amyl and benzyl ester of the matrinic acid. They are easily soluble in water and common organic solvents, more difficultly in petroleum ether. The properties of the esters synthesized are presented in the table. There are 1 table and 2 references, 1 of which is Soviet.

ASSOCIATION: Sredneaziatskiy gosudarstvennyy universitet i Bukharskiy pedagogicheskiy institut [(Soviet) Central Asia State University and Bukhara Pedagogical Institute]

SUBMITTED: June 26, 1958

Card 3/3

PAKANAYEV, Ya.I.; SADYKOV, A.S.

Alkaloids of the C15 series. Part 7: New alkaloids of Sophora pachycarpa. Zhur.ob.khim. 31 no.7:2428-2432 Jl '61. (MIRA 14:7)

1. Bukharskiy gosudarstvennyy pedagogicheskiy institut i Sredneaziatskiy gosudarstvennyy universitet imeni V.I. Lenina.
(Alkaloids)

PAKANAYEV, Ya.I.; SADYDOV, A.S.

C_{15} alkaloids. Part 12: Structure of "geebelin." Zhur.ob.khim. 33 no.4:1374-1378 Ap '63. (MIRA 16:5)

1. Bukharskiy gosudarstvennyy pedagogicheskiy institut i Tashkentskiy gosudarstvennyy universitet imeni V.I.Lenina.
(Alkaloids)

PAKAREKITE, K. Yu.: Master Biol Sci (diss) -- "The dynamics of certain compo-
nents of arterial and venous blood in cows during full lactation". Vil'nyus,
1959. 20 pp (Min Higher Educ USSR, Vil'nyus State U im V. Kapsukas), 150 copies
(KL, No 18, 1959, 125)

KONOPKAYTE, S.I.[Konopkaite, S.]; PAKARSKITE, K.I.[Pakarskyte, K.];
DACHYULITE, Ya.A.[Daculyte, J.]; KUDOKAS, S.P.;
GIBAVICHYUTE, A.S.[Gibaviciute, A.]

Preservation of North Sea herring in chilled seawater. Part 2:
Biochemical research. Khol. tekh. 39 no.5:29-32 S-O '62.
(MIRA 16:7)

1. Institut botaniki AN Litovskoy SSR.
(Fishery products—Preservation)
(Cold storage on shipboard)
(Biochemistry)

L [illegible]
ACC NR: AP6020035 (A) SOURCE CODE: UR/0066/66/000/002/0036/0040

AUTHOR: Konopkayte, S. I.; Dachyulite, Ya. A.; Pakarskite, K. Yu.

ORG: Department of Biochemistry of Microorganisms, Institute of Botany, Lithuanian SSR (Sektor biokhimii mikroorganizmov Instituta botaniki Litovskoy SSR)

TITLE: Investigations on the storage of North Sea herring in refrigerated sea water. II. Biochemical investigations

SOURCE: Kholodil'naya tekhnika, no. 2, 1966, 36-40

TOPIC TAGS: food, food preservation, refrigeration, sea water, FOOD CHEMISTRY

ABSTRACT: Investigations were carried out to study in more detail the dynamics of certain biochemical processes and to obtain a comparative biochemical evaluation of certain methods of storing North Sea herring in sea water and in ice. Since the method of storing herring in refrigerated sea water resulted in the swelling of the fish tissue and accelerated extraction of nitrogenous substance, the authors checked the effectiveness of using carboxymethyl cellulose (CMC) against swelling. Three versions of the experiments were set up. 1) The herring were stored in refrigerated sea water at -1.2 to -1.5C with 4000 kg of water for each 2000 kg of fish.

UDC: 637.56.004.4:551.463/.464

Card 1/3

The water was changed every other day. 2) The herring were stored at 1.0°C in refrigerated sea water with the addition of 1.6% CMC, with 5200 kg of water per 800 kg of fish. The water was changed every other day. 3) The herring were stored at 0°C in crushed ice in boxes at a rate of 30 kg in each. The authors determined the following indexes: proteolytic activity, extractive and total nitrogen, iodine and peroxide numbers of fat, and content of thiamine, riboflavin, folic acid, and vitamin B_{12}. Finally minced muscle tissue was used for the analysis. The data characterizing the effect of the period and conditions of storing herring on its content of nitrogenous substances and quality of fat showed that in all cases the same proteolytic activity, in comparison with fresh herring, was retained during the first half-day of its storage, then the activity gradually increased. The increase of activity stopped on the third day for the herring stored in refrigerated sea water. There was a noticeable drop of proteolytic activity after four days' storage. The proteolytic activity of herring stored in refrigerated sea water with the addition of CMC changed more smoothly. There was a noticeable increase in activity for the herring stored for one day, but the activity dropped after 5—6 days of storage. For the herring stored in ice the proteolytic activity increased a day later than for the fish stored in refrigerated water with the addition of CMC. The drop of activity in time was the same as for the herring stored in the refrigerated water. It was found that the preparation CMC protects herring to a certain degree against extraction of nitrogenous substances, inhibits the processes of proteolysis, and has a favorable effect on the preservation of vitamins. However, the investigated concentrations are insufficient to

L 2901-66
ACC NR: AP6020035

prevent undesirable biochemical processes in the herring during storage. Orig. art. has: 2 tables.

SUB CODE: 06/ SUBM DATE: 00/ ORIG REF: 010/ OTH REF: 000

Card 3/3

PAKARSKITE, K. Yu., (USSR)

"Biosynthesis of Folic Acid, Thiamine and Riboflavin during the Developmental Cycle of the Bacterial Cell."

Report presented at the 5th Int'l. Biochemistry Congress, Moscow, 10-16 Aug 1961.

H-13

BULGARIA/Chemical Technology - Chemical Products and Their Application. Ceramics. Glass. Binding Materials. Concretes.

Abs Jour : Ref Zhur - Khimiya, No 17, 1958, 58232

Author : Svoboda K, Pakas V.
Inst : -
Title : The Production of Cement in Shaft Furnaces.

Orig Pub : Tekhnika (Bulg.), 1956, 5, No 5, 45-47.

Abstract : No abstract.

Card 1/1

PAKCHANIN, L.M.

ZHMUDSKIY, A.Z. [Zhmuds'kyi, O.Z.]; PAKCHANIN, L.M.

Physical strength of the 20x cemented steel. Nauk povid. KDU no.1:39-41 '56. (MIRA 11:4)
(Steel--Testing)

L 6675-65 EWT(m)/EWP(q)/EWP(b) MJW/JD

47

ACCESSION NR: AR4036007 S/0276/64/000/003/B065/B065

SOURCE: Ref. zh. Tekhnol. mashinostr. Sv. t., Abs. 3B327

AUTHOR: Zhmudz'ky*y, O. Z.; Pakohanin, L. M.; Chuyko, L. Kh.

TITLE: The influence of high-temperature carburization on the mechanical properties of steels

CITED SOURCE: Visny*k Ky*yivs'k. un-tu, no. 5, 1962, ser. fiz. ta khimiyi, vy*p. 2, 3-5

TOPIC TAGS: steel, steel heat treatment, steel carburization, steel case hardening, high temperature steel carburization, steel strength

TRANSLATION: The influence of high-temperature carburization on the maximum strength of 10, 15Kh, and 18KhGT steels was studied for temperatures of 900, 1,000, and 1,100 degrees. High-temperature carburization in the above temperature range does not lower the maximum strength.

SUB CODE: MM ENCL: 00

Card 1/1

LAPINSKI, Zdzislaw;SCHLEIFER, Leon; PAK-CZU-SOK

Surgical complications of digestive amebiasis. Polski tygod. lek. 11 no.24:1062-1067 11 June 56.

1. Z I Klin. Chirur. Akad. Med. w Hanhynie, KRLD; p.o. kier. Klin. doc. dr Zdzislaw Lapinski. Warszawa, ul. Kopernika 11 m. 23.
(AMEBIASIS, INTESTINAL, complications, surg. (Pol))

BODUNOV, D.I.; GOL'DBERG, B.V.; PAKEL'CHIK, M.Z.; BITAUTAS, V.S., spets. red.; IZRAYELIS, G.N.[Izraelis, G.], spets. red.; MALITSKAS, A., red.; BARONAS, S.K., tekhn. red.

[Collection of unit estimates for construction work in Lithuania; for construction projects of the second class] Sbornik edinichnykh rastsenok na stroitel'nye raboty po Litovskoi SSR; dlia vtoroi gruppy stroek. Vilniu, TSentr. biuro tekhn. informatsii i propagandy. Vol.2. 1961. 580 p. (MIRA 15:3)

1. Lithuanian S.S.R. Valstybinis statybos ir architekturos reikalu komitetas.

(Lithuania—Building—Estimates)

VOROB'YEV, N.N., red.; GNEDENKO, B.V., red.; DOBRUSHIN, R.L., red.; DYNKIN, Ye.B., red.; KOLMOGOROV, A.N., red.; KUBILYUS, I.P. [Kubilius, I.P.], red.; LINNIK, Yu.V., red.; PROKHOROV, Yu.V., red.; SMIRNOV, N.V., red.; STATULYAVICHYUS, V.A.[Statuliavicius, V.A.], red.; YAGLOM, A.M., red.; MELINENE, D., red.; PAKERITE, O., tekhn. red.

[Transactions of the Sixth Conference on Probability Theory and Mathematical Statistics, and of the Colloquy on Distributions in Infinite-Dimensional Spaces]Trudy 6 Vsesoiuznogo soveshchaniia po teorii veroiatnostei i matematicheskoi statistike i kollokviuma po raspredeleniiam v beskonechnomernykh prostranstvakh. Vilnius, Palanga, 1960. Vil'nius, Gos.izd-vo polit. i nauchn. lit-ry Litovskoi SSR, 1962. 493 p. (MIRA 15:12)

1. Vsesoyuznoye soveshchaniye po teorii veroyatnostey i matematicheskoy statistike i kollokviuma po raspredeleniyam v beskonechnomernykh prostranstvakh. 6th, Vilnius, Palanga, 1960.
(Probabilities--Congresses) (Mathematical statistics--Congresses)
(Distribution (Probability theory))--Congresses)

PAKH, E.M.; PONOMAREV, V.V.

Evaluation of the outlook for coking coals in the Kuznetsk Basin. Razved. i okh. nedr 28 no.9:35-41 S '62. (MIRA 15:9)

1. Trest "Kuzbassuglegeologiya".
(Kuznetsk Basin--Coal geology)

AMMOSOV, I.I.; YEREMIN, I.V.; PAKH, E.M.; BOYEV, A.I.

Petrographic studies and prediction of the coking capacity of coals. Razved. i okh. nedr 27 no.12:11-16 D '61. (MIRA 15:3)

1. Institut geologii i razrabotki goryuchikh iskopayemykh AN SSSR (for Ammosov, Yeremin). 2. Trest Kuzbassuglegeologiya" (for Pakh, Boyev).

(Coal) (Coke)

ZYBAREV, A.; PAKHOLKOV, D.

New heating system for the ZIL-158 motorbuses. Avt.transp. 38 no.1:40-41 Ja '60. (MIRA 13:5)
(Motorbuses)

PAKCHANIN, L. M.

25(6) PHASE I BOOK EXPLOITATION SOV

Mashino-tekhnicheskoye obshchestvo priborostroitel'noy promyshlennosti. Ukrainskoye respublikanskoye pravleniye

Novyye metody kontrolya i defektoskopii v mashinostroyenii i priborostroyenii [doklady Respublikanskoy konferentsii] (New Methods of Inspection and Flaw Detection in the Machinery and Instrument-manufacturing Industries [Reports of the Conference Held at Kiyev, 1956]) Kiyev, Gostekhizdat USSR, 1958. 264 p. 4,700 copies printed.

Sponsoring Agency: Akademiya nauk USSR.

Ed.: A. Aselin; Tech. Ed.: P. Patsaliyuk; Editorial Board: I.I. Greben', B.D. Grozin, A.Z. Zhmudskiy, O.N. Savin (Resp. Ed.), I.D. Payvenson (Dep. Resp. Ed.), and A.A. Shlenkovskiy.

PURPOSE: This book is intended for engineers, scientific workers, and technicians dealing with problems of inspection and flaw detection.

COVERAGE: This is a collection of scientific papers presented at a conference sponsored by the Academy of Sciences, UkrSSR, and the Mashino-tekhnicheskoye obshchestvo priborostroitel'noy promyshlennosti, Ukrainskoye pravleniye (Ukrainian Branch, Scientific and Technical Society of the Instrument-manufacturing Industry). The papers deal with modern methods of inspection and flaw detection used in the machinery- and instrument-manufacturing industries. The subjects discussed include the use of electron microscopes in the investigation of metal surfaces, X-ray, gamma-ray, luminescence, magnetic, and ultrasonic methods of flaw detection, luminescent radioactive isotopes, X-ray diffraction methods of metal analysis, and the use of interferometers for measuring length and thickness and determining the coefficient of linear thermal expansion. No personalities are mentioned. References follow several of the papers.

PAKCHANIN, L.M.

~~GIDEL, A. YU.~~

25(6) **PHASE I BOOK EXPLOITATION** SOV/2555

Nauchno-tekhnicheskoye obshchestvo priborostroitel'noy promyshlennosti. Ukrainskoye respublikanskoye pravleniye

Novyye metody kontrolya i defektoskopii v mashinostroyenii i priborostroyenii [doklady Respublikanskoy konferentsii] (New Methods of Inspection and Flaw Detection in the Machinery and Instrument-manufacturing Industries [Reports of the Conference Held at Kiyev, 1956]) Kiyev, Gostekhizdat USSR, 1958. 264 p. 4,700 copies printed.

Sponsoring Agency: Akademiya nauk USSR.

Ed.: A. Amelin; Tech. Ed.: P. Patsalyuk; Editorial Board: I.I. Greben', B.D. Grozin, A.Z. Zhmudskiy, G.N. Savin (Resp. Ed.), I.D. Faynerman (Dep. Resp. Ed.), and A.A. Shishlovskiy.

PURPOSE: This book is intended for engineers, scientific workers, and technicians dealing with problems of inspection and flaw detection.

COVERAGE: This is a collection of scientific papers presented at a conference sponsored by the Academy of Sciences, UkrSSR, and the Nauchno-tekhnicheskoye obshchestvo priborostroitel'noy promyshlennosti, Ukrainskoye pravleniye (Ukrainian Branch, Scientific and Technical Society of the Instrument-manufacturing Industry). The papers deal with modern methods of inspection and flaw detection used in the machinery- and instrument-manufacturing industries. The subjects discussed include the use of electron microscopes in the investigation of metal surfaces, X-ray, gamma-ray, luminescense, magnetic, and ultrasonic methods of flaw detection; use of radioactive isotopes, X-ray diffraction methods of metal analysis; and the use of interferometers for measuring length and thickness and determining the coefficient of linear thermal expansion. No personalities are mentioned. References follow several of the papers.

Card 4/9

PAKCHANIN, L. M.

USSR/Solid State Physics - Mechanical Properties of Crystals and Polycrystalline Compounds. E-10

Abs Jour : Referat Zhur - Fizika, No 5, 1957, 11930

Author : Zhmudskiy, A.Z., Pakchanin, L.M.

Inst : -

Title : Certain Problems Concerning the Physical Strength of Cemented Steel Type 20 Kh.

Orig Pub : Nauch. povidomlennya Kiivs'k. un-tu, 1956, vyp. 1, 39-41

Abstract : No abstract.

Card 1/1

Pakenas, P

USSR / Farm Animals. General Problems. Q-1

Abs Jour: Ref Zhur-Biol., No 23, 1958, 105634.

Author : Zhebenka, R., Pakenas, P.
Inst : Not given.
Title : Artificial Insemination of Animals.

Orig Pub: Soc. zemes ukis., 1957, No 12, 18-24.

Abstract: No abstract.

PAKENAS, P. I.

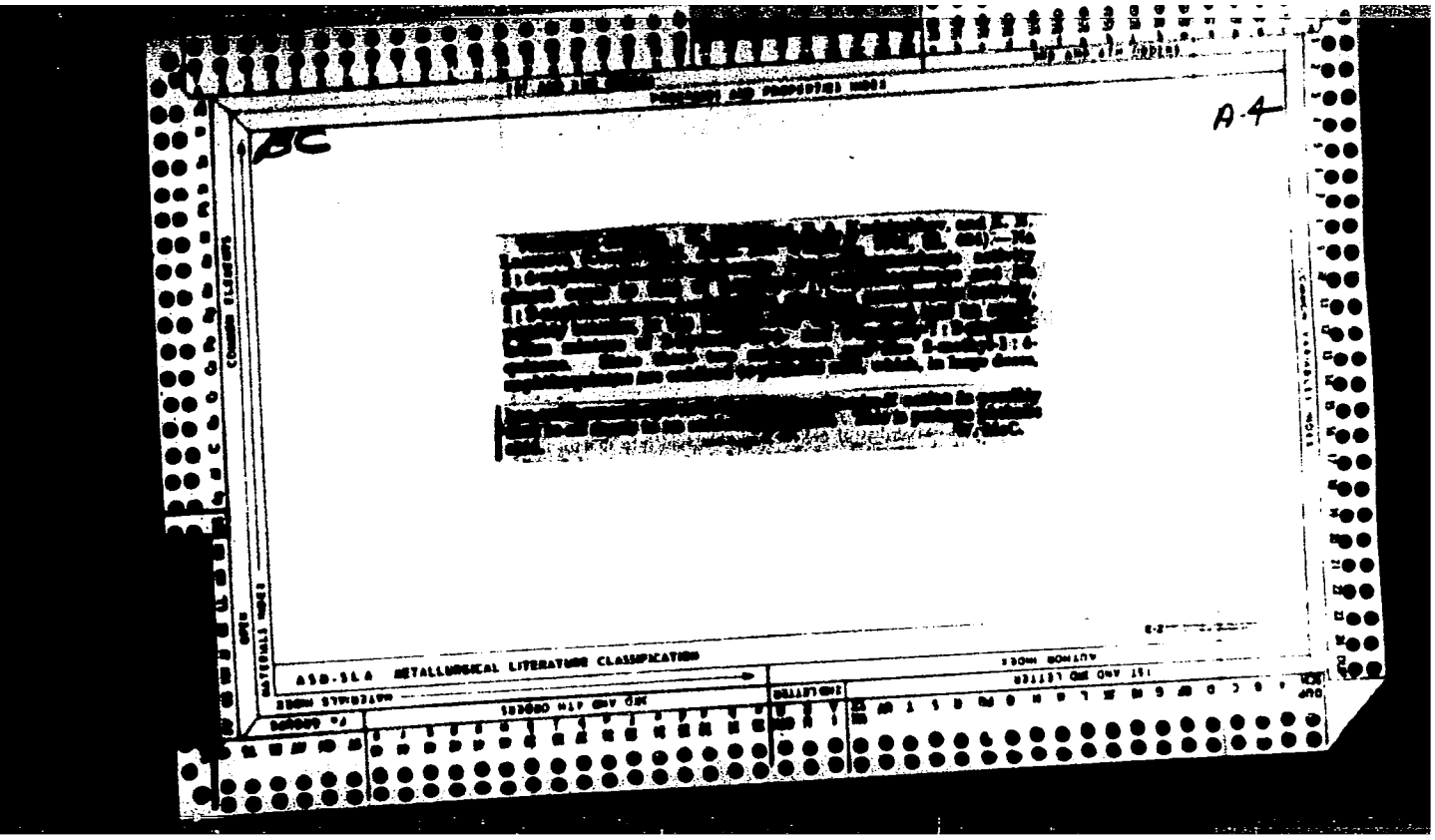
"Influence of green and grain ratio [illegible] growth and [illegible]"

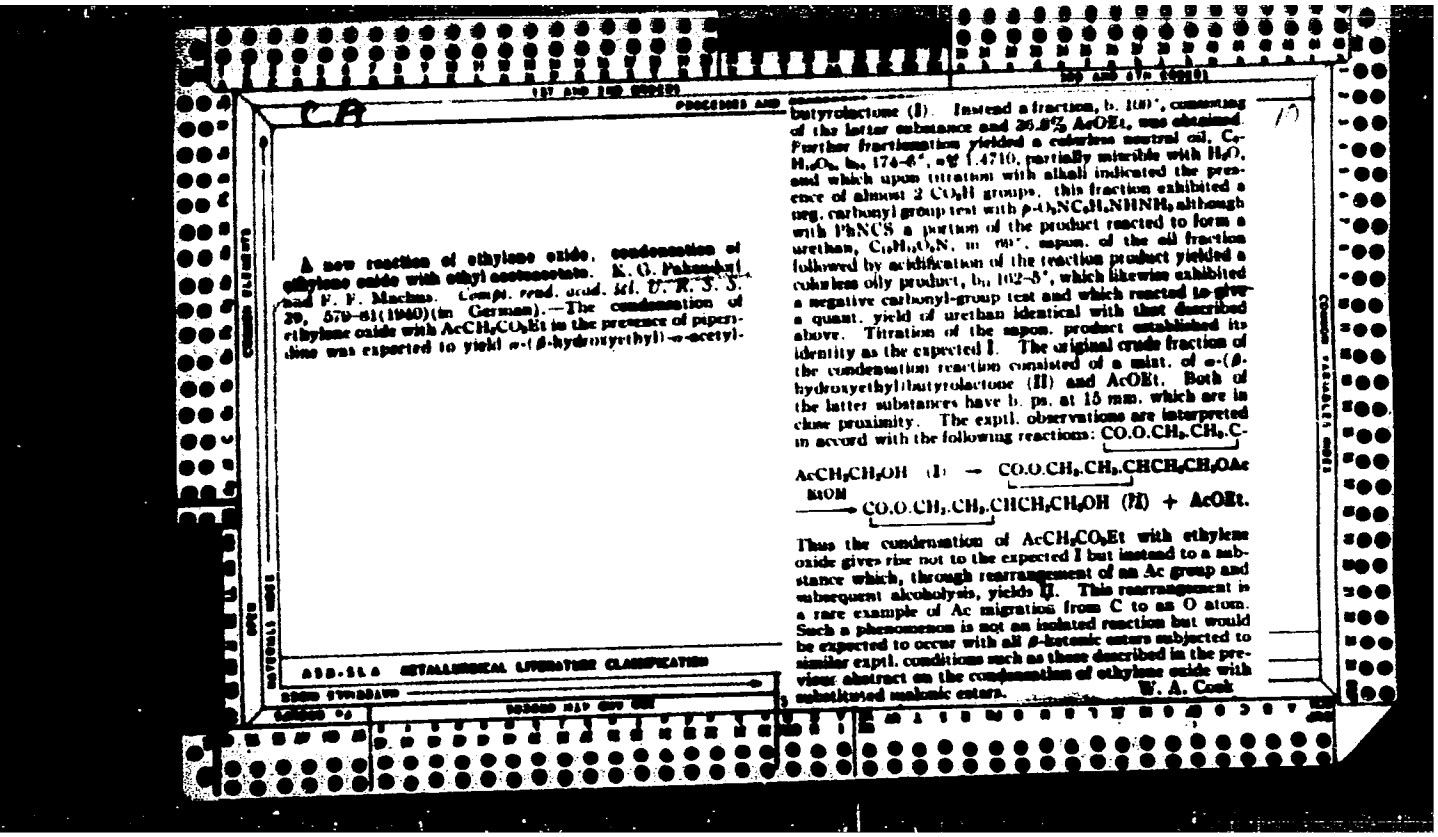
report submitted for 6th Int. Cong, Animal Reproduction & Artificial Insemination, Trent, Italy, 6-13 Sep 64.

ZHEBENKA, R.P. [Zebenka, R.P.], kand. sel'skokhozyaystvennykh nauk; PAKENAS, P.I., kand. biol. nauk

Organization of breeding work in the Lithuanian S.S.R. Zhivotnovodstvo 21 no.11:43-47 N '59 (MIRA 13:3)

1. Direktor Litovskogo nauchno-issledovatel'skogo instituta zhivotnovodstva i veterinarii (for Zhebenka). 2. Zaveduyushchiy laboratoriyey iskusstvennogo osemeneniya sel'skokhozyaystvennykh zhivotnykh. (Lithuania--Stock and stockbreeding)





A new reaction of ethylene oxide. condensation of ethylene oxide with ethyl acetoacetate. K. G. Pakushkin and F. F. Machus. *Compt. rend. acad. sci. U. R. S. S.* 29, 579–81(1960)(in German).—The condensation of ethylene oxide with $AcCH_2CO_2Et$ in the presence of piperidine was expected to yield α-(β-hydroxyethyl)-α-acetyl-

butyrolactone (I). Instead a fraction, b. 110°, consisting of the latter substance and 26.8% AcOEt, was obtained. Further fractionation yielded a colorless neutral oil, $C_6H_{10}O_3$, bp 176–6°, n_D^{20} 1.4710, partially miscible with H_2O, and which upon titration with alkali indicated the presence of almost 2 CO_2H groups. this fraction exhibited a neg. carbonyl group test with $p\text{-}O_2NC_6H_4NHNH_2$ although with PhNCS a portion of the product reacted to form a urethan, $C_{13}H_{16}O_4N_2$, m. 98°. saponn. of the oil fraction followed by acidification of the reaction product yielded a colorless oily product, b_{11} 102–5°, which likewise exhibited a negative carbonyl-group test and which reacted to give a quant. yield of urethan identical with that described above. Titration of the saponn. product established its identity as the expected I. The original crude fraction of the condensation reaction consisted of a mixt. of α-(β-hydroxyethyl)butyrolactone (II) and AcOEt. Both of the latter substances have b. pa. at 15 mm. which are in close proximity. The exptl. observations are interpreted in accord with the following reactions: $CO.O.CH_2.CH_2.C$-

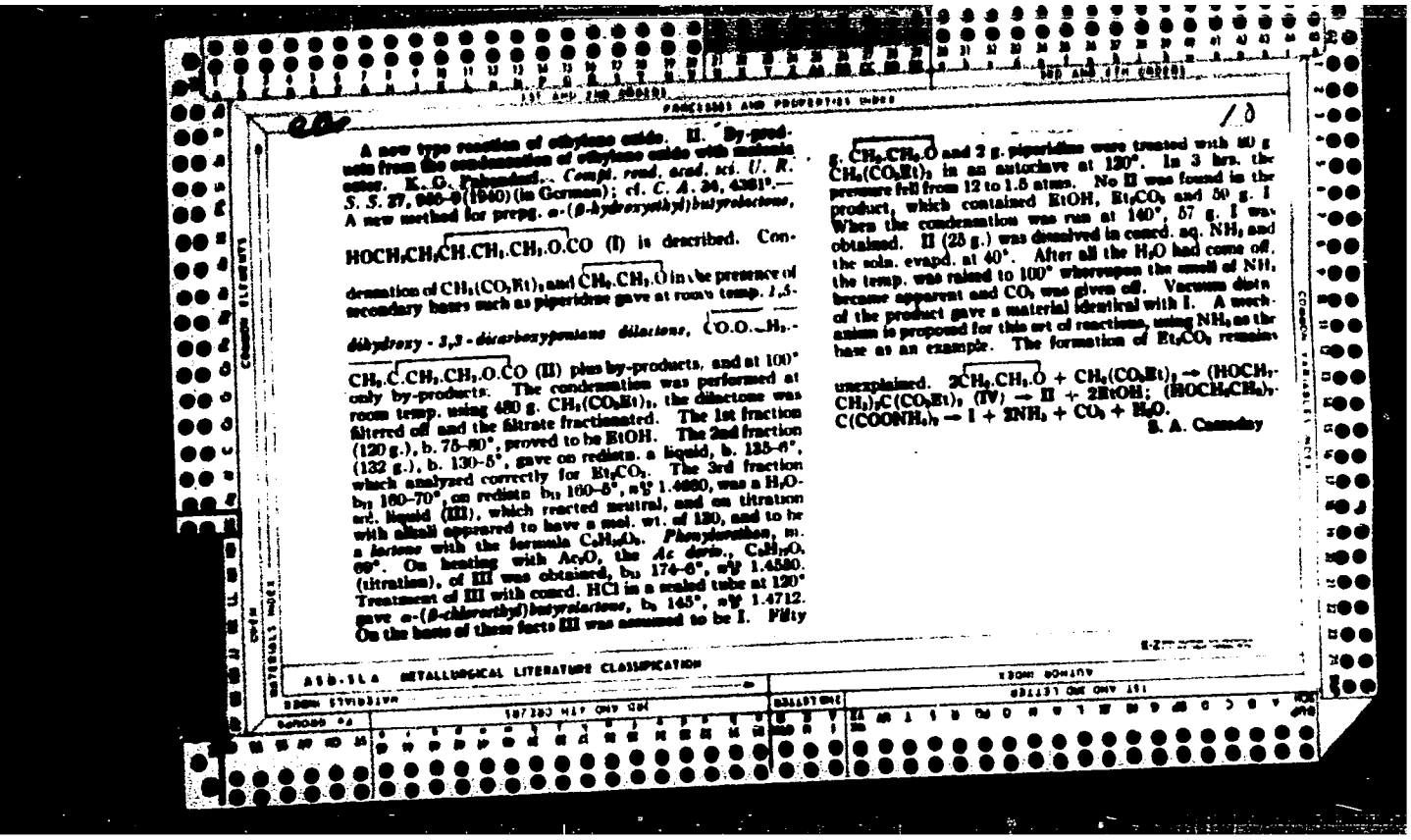
$AcCH_2CH_2OH$ (I) → $CO.O.CH_2.CH_2.CHCH_2CH_2OAc$

NaOH

→ $CO.O.CH_2.CH_2.CHCH_2CH_2OH$ (II) + AcOEt.

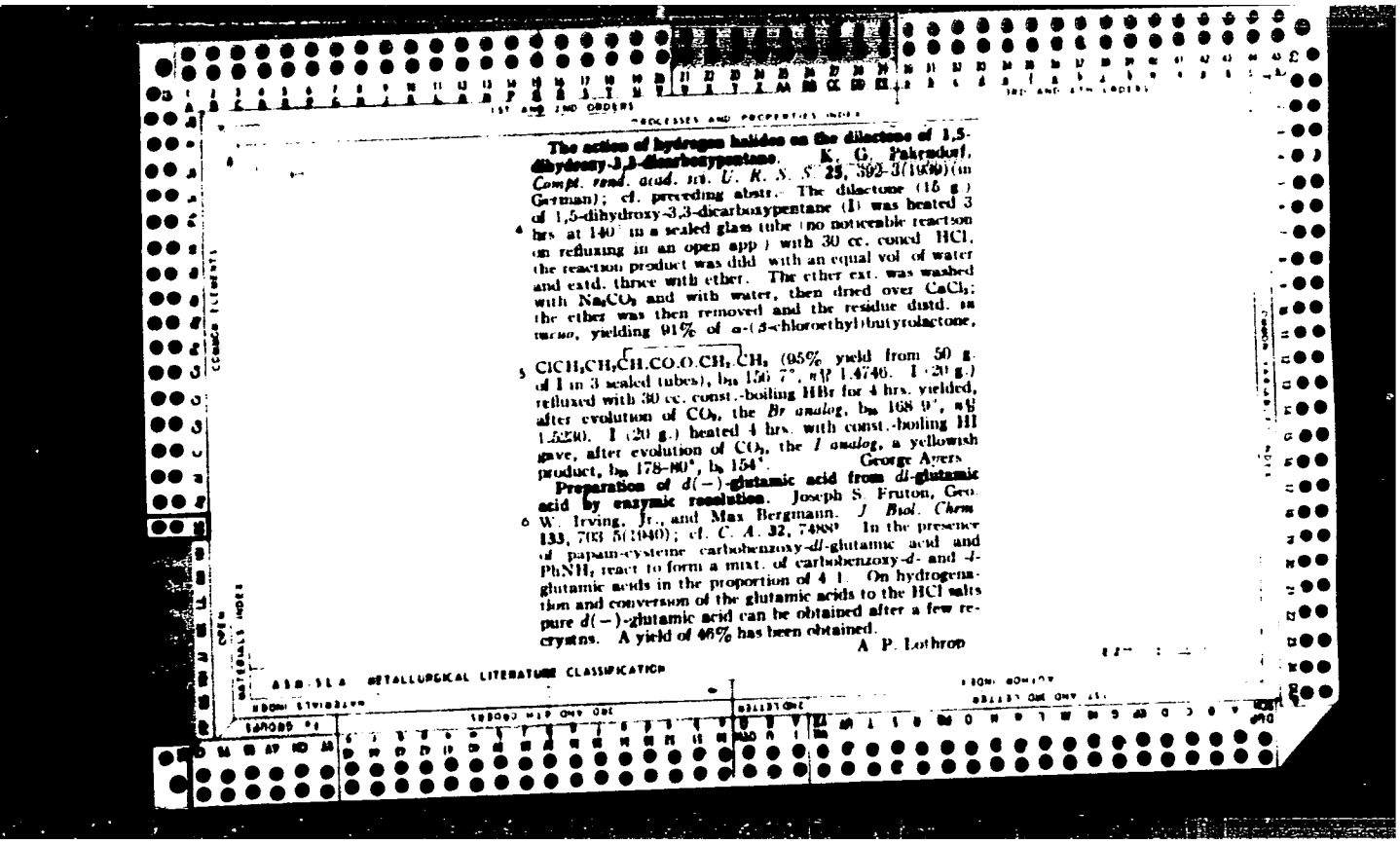
Thus the condensation of $AcCH_2CO_2Et$ with ethylene oxide gives rise not to the expected I but instead to a substance which, through rearrangement of an Ac group and subsequent alcoholysis, yields II. This rearrangement is a rare example of Ac migration from C to an O atom. Such a phenomenon is not an isolated reaction but would be expected to occur with all β-ketonic esters subjected to similar exptl. conditions such as those described in the previous abstract on the condensation of ethylene oxide with substituted malonic esters.

W. A. Cook



A new type reaction of ethylene oxide. II. By-products from the condensation of ethylene oxide with malonic ester. K. G. Fahrenkrug. *Compt. rend. acad. sci. U. R. S. S.* 27, 980–9 (1940) (in German); cf. *C. A.* 34, 4381⁹.—A new method for prepg. α-(β-*hydroxyethyl*)*butyrolactone*, $HOCH_2CH_2CH.CH_2.CH_2.O.CO$ (I) is described. Condensation of $CH_2(CO_2Et)_2$ and $CH_2.CH_2.O$ in the presence of secondary bases such as piperidine gave at room temp. 1,5-*dihydroxy*-3,3-*dicarbocyppentane dilactone*, $CO.O.CH_2.CH_2.C.CH_2.CH_2.O.CO$ (II) plus by-products, and at 100° only by-products. The condensation was performed at room temp. using 480 g. $CH_2(CO_2Et)_2$, the dilactone was filtered off and the filtrate fractionated. The 1st fraction (120 g.), b. 75–80°, proved to be EtOH. The 2nd fraction (132 g.), b. 130–5°, gave on redistn. a liquid, b. 135–6°, which analyzed correctly for Et_2CO_3. The 3rd fraction b$_{11}$ 160–70°, on redistn b$_{11}$ 160–5°, n_D^{20} 1.4660, was a H_2O-wt. liquid (III), which reacted neutral, and on titration with alkali appeared to have a mol. wt. of 130, and to be a lactone with the formula $C_6H_{10}O_3$. *Phenylurethan*, m. 69°. On heating with Ac_2O, the *Ac deriv.*, $C_8H_{12}O_4$, (titration), of III was obtained, b$_{11}$ 174–6°, n_D^{20} 1.4580. Treatment of III with concd. HCl in a sealed tube at 120° gave α-(β-*chloroethyl*)*butyrolactone*, b$_5$ 145°, n_D^{20} 1.4712. On the basis of these facts III was assumed to be I. Fifty g. $CH_2.CH_2.O$ and 2 g. piperidine were treated with 80 g $CH_2(CO_2Et)_2$ in an autoclave at 120°. In 3 hrs. the pressure fell from 12 to 1.5 atms. No II was found in the product, which contained EtOH, Et_2CO_3 and 50 g. I. When the condensation was run at 140°, 57 g. I was obtained. II (25 g.) was dissolved in concd. aq. NH_3 and the soln. evapd. at 40°. After all the H_2O had come off, the temp. was raised to 100° whereupon the smell of NH_3 became apparent and CO_2 was given off. Vacuum distn of the product gave a material identical with I. A mechanism is proposed for this set of reactions, using NH_3 as the base as an example. The formation of Et_2CO_3 remains unexplained. $2CH_2.CH_2.O + CH_2(CO_2Et)_2 \rightarrow (HOCH_2CH_2)_2C(CO_2Et)_2$ (IV) $\rightarrow$ II + 2EtOH; $(HOCH_2CH_2)_2C(COONH_4)_2 \rightarrow$ I + $2NH_3$ + CO_2 + H_2O.

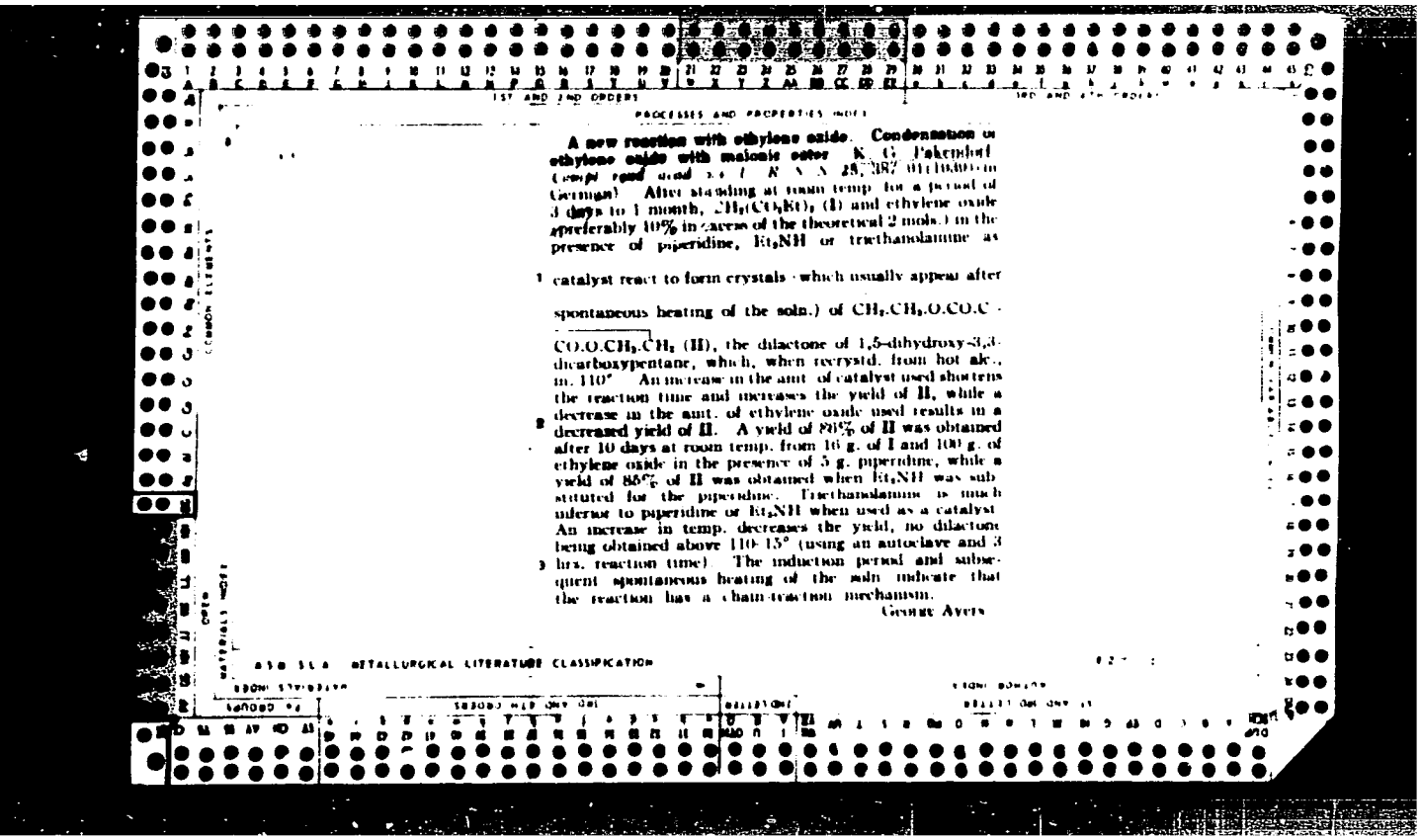
S. A. Cassaday



The action of hydrogen halides on the dilactone of 1,5-dihydroxy-3,3-dicarboxypentane. K. G. Pakrashi, *Compt. rend. acad. sci. U. R. S. S.* **25**, 392-3(1939)(in German); cf. preceding abstr. The dilactone (15 g.) of 1,5-dihydroxy-3,3-dicarboxypentane (I) was heated 3 hrs. at 140° in a sealed glass tube (no noticeable reaction on refluxing in an open app.) with 30 cc. concd. HCl, the reaction product was dild. with an equal vol. of water and extd. thrice with ether. The ether ext. was washed with Na_2CO_3 and with water, then dried over $CaCl_2$; the ether was then removed and the residue distd. *in vacuo*, yielding 91% of α-(β-chloroethyl)butyrolactone, $ClCH_2CH_2CH.CO.O.CH_2.CH_2$ (95% yield from 50 g. of I in 3 sealed tubes), bp 150.7°, n_D^{20} 1.4746. I (20 g.) refluxed with 30 cc. const.-boiling HBr for 4 hrs. yielded, after evolution of CO_2, the *Br analog*, bp 168.9°, n_D^{20} 1.5230. I (20 g.) heated 4 hrs. with const.-boiling HI gave, after evolution of CO_2, the *I analog*, a yellowish product, bp 178–80°, bp 154°. George Ayers

Preparation of *d*(−)-glutamic acid from *dl*-glutamic acid by enzymic resolution. Joseph S. Fruton, Geo. W. Irving, Jr., and Max Bergmann. *J. Biol. Chem.* **133**, 703-5(1940); cf. *C. A.* **32**, 7488⁹. In the presence of papain-cysteine carbobenzoxy-*dl*-glutamic acid and $PhNH_2$ react to form a mixt. of carbobenzoxy-*d*- and -*l*-glutamic acids in the proportion of 4:1. On hydrogenation and conversion of the glutamic acids to the HCl salts pure *d*(−)-glutamic acid can be obtained after a few recrystns. A yield of 46% has been obtained.

A. P. Lothrop



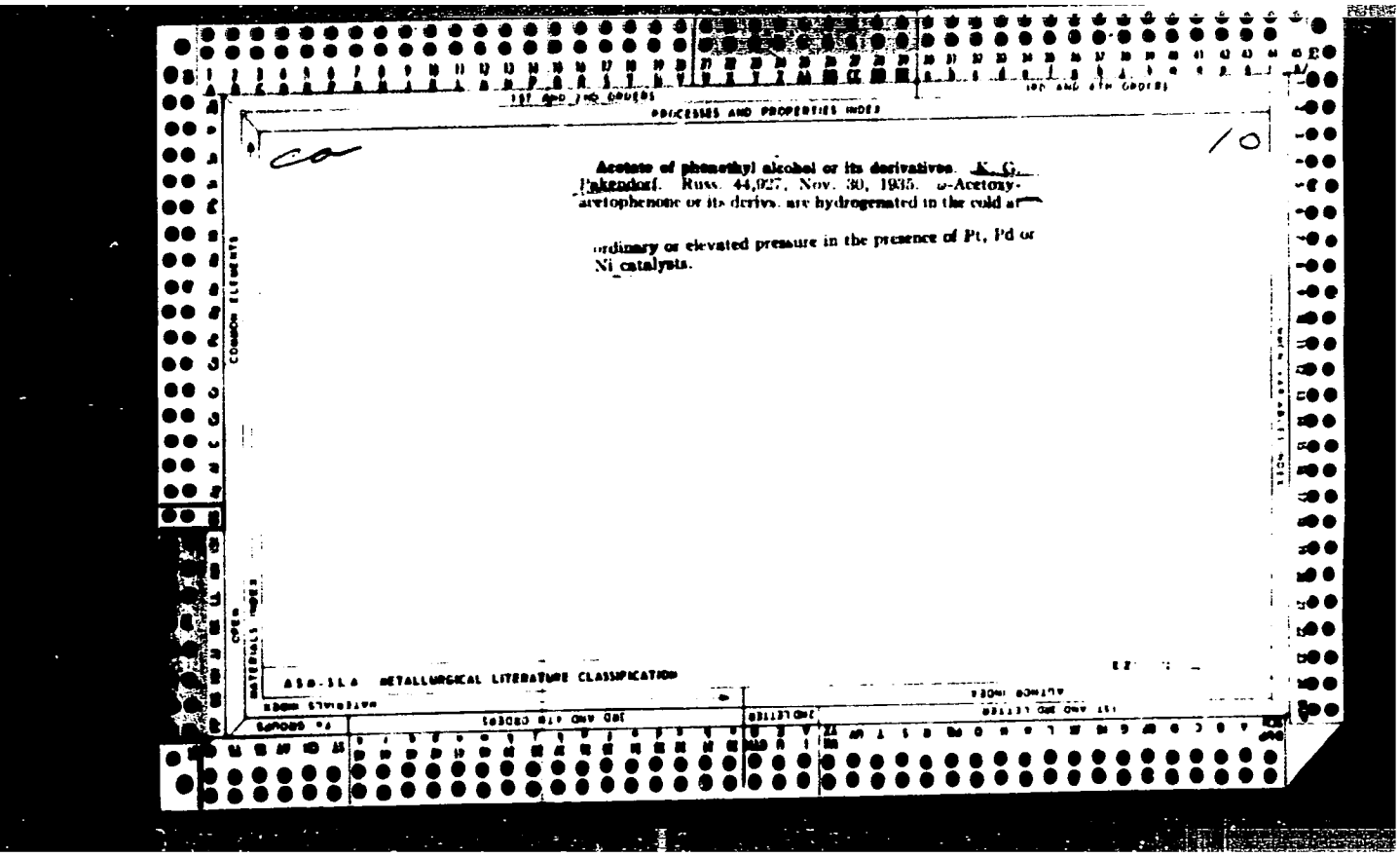
1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

A new reaction with ethylene oxide. Condensation of ethylene oxide with malonic ester. K. G. Fakentbof (*Compt. rend. acad. sci. U. R. S. S.* 25, 387-91(1940)) (in German). After standing at room temp. for a period of 3 days to 1 month, $CH_2(CO_2Et)_2$ (I) and ethylene oxide (preferably 10% in excess of the theoretical 2 mols.) in the presence of piperidine, Et_2NH or triethanolamine as catalyst react to form crystals (which usually appear after spontaneous heating of the soln.) of $CH_2.CH_2.O.CO.C(CO_2Et).CH_2.CH_2.O.CO.CH_2.CH_2$ (II), the dilactone of 1,5-dihydroxy-3,3-dicarboxypentane, which, when recrystd. from hot alc., m. 110°. An increase in the amt. of catalyst used shortens the reaction time and increases the yield of II, while a decrease in the amt. of ethylene oxide used results in a decreased yield of II. A yield of 80% of II was obtained after 10 days at room temp. from 16 g. of I and 100 g. of ethylene oxide in the presence of 5 g. piperidine, while a yield of 86% of II was obtained when Et_2NH was substituted for the piperidine. Triethanolamine is much inferior to piperidine or Et_2NH when used as a catalyst. An increase in temp. decreases the yield, no dilactone being obtained above 110-15° (using an autoclave and 3 hrs. reaction time). The induction period and subsequent spontaneous heating of the soln. indicate that the reaction has a chain-reaction mechanism.

George Ayers

A58 51A METALLURGICAL LITERATURE CLASSIFICATION



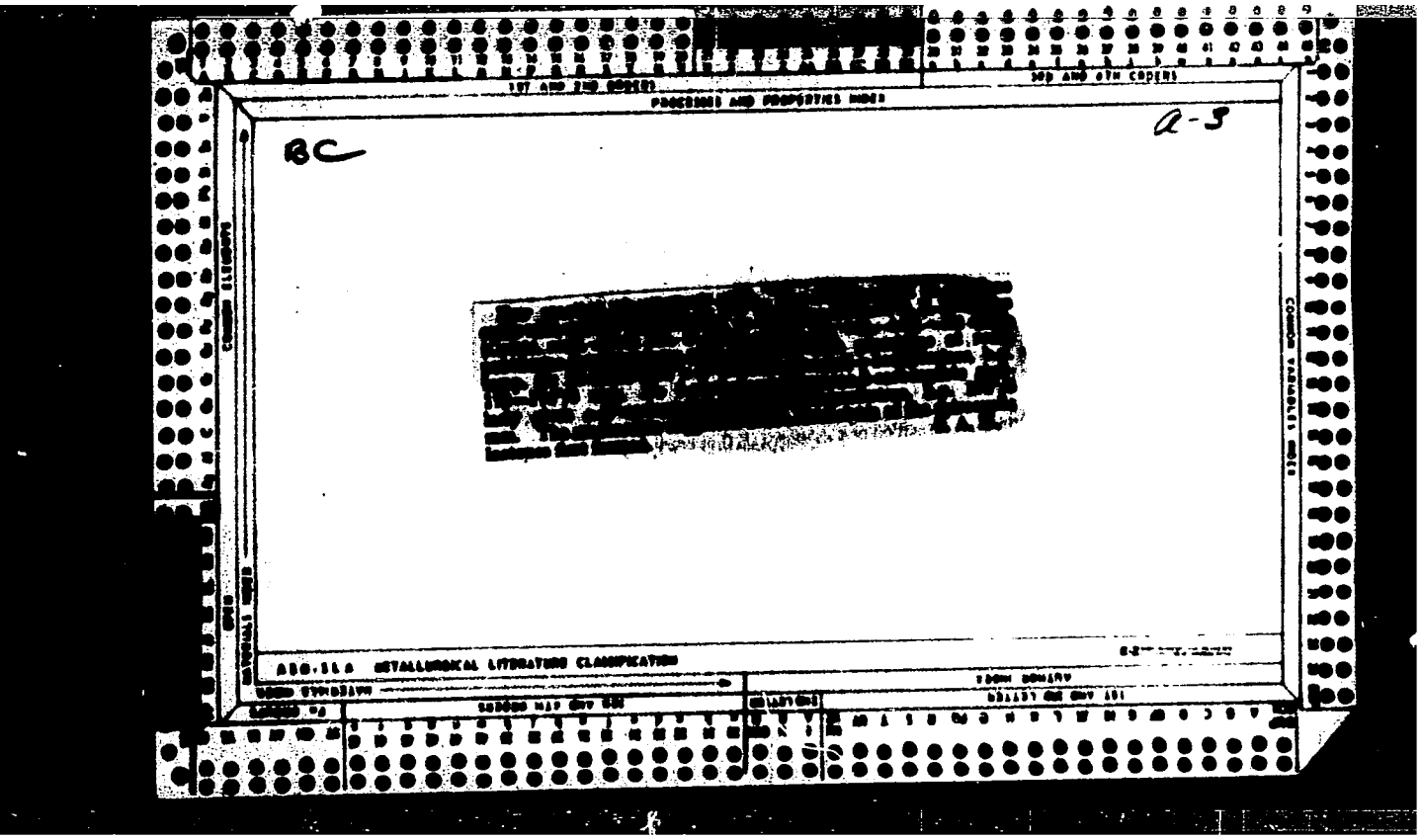
PROCESSES AND PROPERTIES INDEX

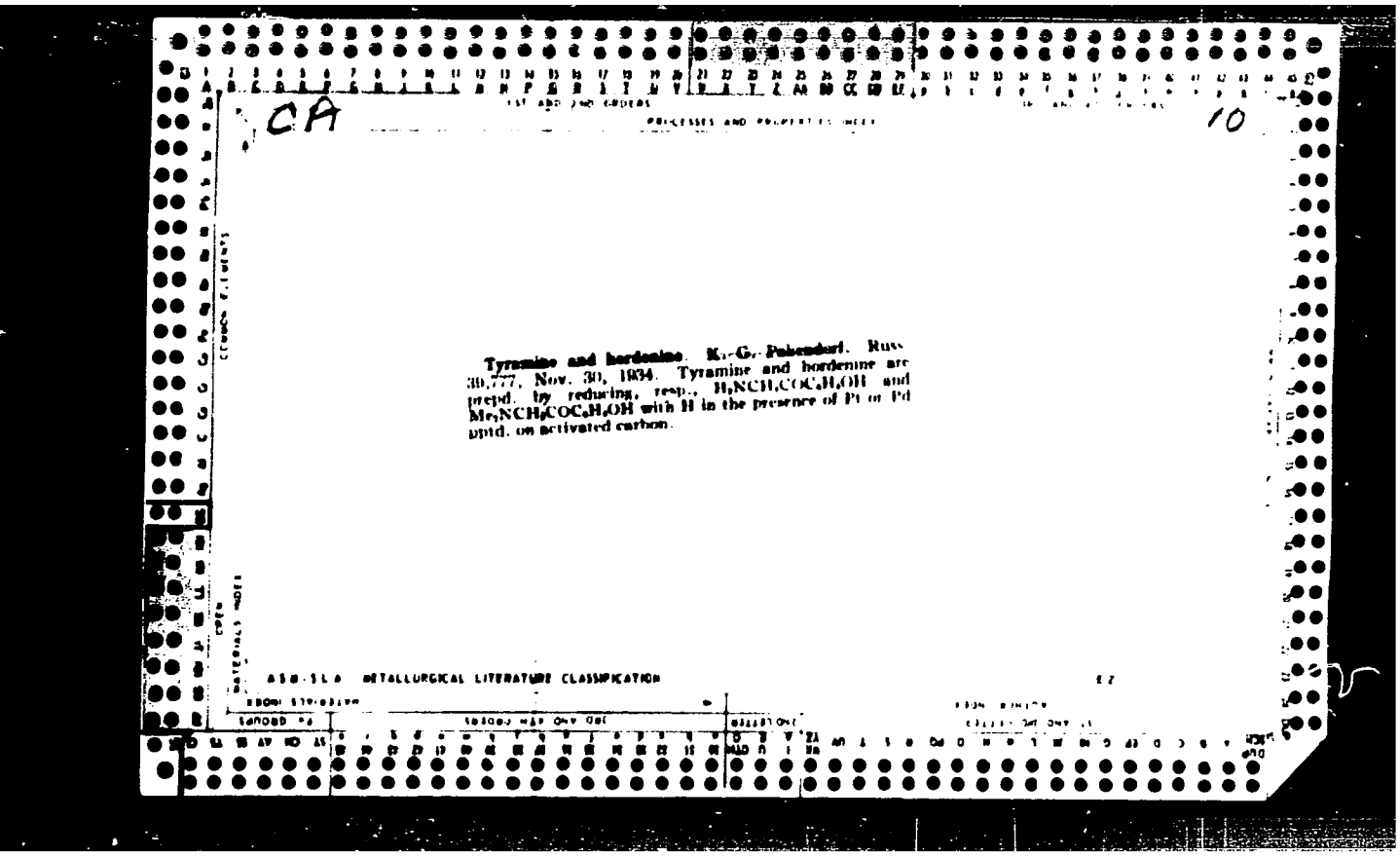
Ca

10

Acetate of phenethyl alcohol or its derivatives. K. G. Pakendorf. Russ. 44,927, Nov. 30, 1935. o-Acetoxyacetophenone or its derivs. are hydrogenated in the cold at ordinary or elevated pressure in the presence of Pt, Pd or Ni catalysts.

A50-11A METALLURGICAL LITERATURE CLASSIFICATION





CA

10

Tyramine and hordenine. K. G. Pakendorf. Russ. 39,777, Nov. 30, 1934. Tyramine and hordenine are prepd. by reducing, resp., $H_2NCH_2COC_6H_4OH$ and $Me_2NCH_2COC_6H_4OH$ with H in the presence of Pt or Pd pptd. on activated carbon.

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

HAKENDORV, K.

"Concerning A New Reaction With Ethylenoxide.

Condensation of Ethylenoxide with Malonic Esters,"

ibid.

"Concerning a New Reaction With Ethylenoxide.

Condensation of Ethylenoside With Acessegester,",

ibid. 29, No. 8-9, 1940.

MOSKVIN, I.B.; PAKENTREYGER, E.A.

Diagnosis of closed bladder lesions. Khirurgiia 39 no.8: 92-97 Ag '63. (MIRA 17:6)

1. Iz travmatologicheskoy kliniki (rukovoditel' - prof. I.I. Sokolov) i rentgenovskogo otdeleniya (zav.- kand. med. nauk. M.K. Shcherbatenko) Moskovskogo gorodskogo nauchno-issledovatel'skogo instituta skoroy pomoshchi imeni N.V. Sklifosovskogo (nauchnyy rukovoditel'- chlen-korrespondent AMN SSSR prof. B.A. Petrov; direktor - zasluzhennyy vrach UkrSSR M.M. Tarasov).

PAKET, A. Ye. and LIPMAN, G. V.

"Introduction to the Aerodynamics of a Compressible Fluid." IIL (1949)

NADZHAKOV, G.; ANTONOV, A.; ZADAROZHNYY, G. [Zadarozhnii, G.]; KONOVA, A.; PAKEVA, S.; YUSKESELIYEVA, L. [IUskeselieva, L.].

A new type of two-layer electret. Doklady BAN 17 no.4:365-368 '64.

L 36027-66 T/EWP(t)/ETI IJP(c) JD

ACC NR: AP6027347 SOURCE CODE: BU/0011/65/018/012/1087/1090

AUTHOR: Nadzhakov, G.; Antonov, A.; Pakeva, S.; Konova, A.

ORG: none

TITLE: Conservation of the homocharge during the dark polarization of sulfur monocrystals

SOURCE: Bulgarska akademiya na naukite. Doklady, v. 18, no. 12, 1965, 1087-1090

TOPIC TAGS: dielectric polarization, photoelectret, electric field, single crystal

ABSTRACT: The creation of photoelectret states within dielectrics is accompanied by dark polarization, i.e., polarization in darkness by means of applied electric fields. During such polarization the surface may acquire hetero- as well as homocharges. G. Nadzhakov et al. (Dokl. BAN, 15, 1962, no. 8, 805) assumed earlier that the applied high voltage causes the ions within the dielectric to be absorbed. The present investigation studied, consequently, in more detail, the creation and decay (in time) of the homocharge during dark polarization of sulfur monocrystals. Diagrams present the time dependence of the polarization, depolarization, and homocharge decay with the applied voltage (1-5 kV) as parameter. The paper ends with a brief discussion of the results. Orig. art. has: 4 figures. [JPRS: 36,465]

SUB CODE: 09, 20 / SUBM DATE: 21Sep65 / ORIG REF: 003 / SOV REF: 003
OTH REF: 002

Card 1/1 MLP

L 34668-66 T/EWP(t)/ETI IJP(c) JD

ACC NR: AP6014717 SOURCE CODE: BU/0011/66/019/001/0013/0016

57
B

AUTHOR: Nadzhakov, G.; Konova, A.; Pakeva, S.

ORG: Sofia University, Physics Department (Fizicheskiy fakul'tet, Sofiyskiy Universitet)

TITLE: Photoelectret effect in small cadmium sulfide single crystals 16

SOURCE: Bulgarska akademiya na naukite. Doklady, v. 19, no. 1, 1966, 13-16

TOPIC TAGS: photoelectret, semiconductor research, semiconductor single crystal, cadmium sulfide, dielectric property, single crystal

ABSTRACT: Small cadmium sulfide single crystals dispersed in araldite resin were studied to determine whether a photoelectret effect can be produced in small single crystals as in large ones. The measurement results show that 1) one part CdS to three parts resin is the most effective ratio, 2) the permanent polarization varies from sample to sample depending on the ratio of CdS to resin, 3) photo-polarization saturation depends on polarization time regardless of illumination intensity and is characteristic of the given sample, 4) the reciprocity law holds for an extensive region which increases with the percent content of resin to CdS, and

Card 1/2

L 34668-66

ACC NR: AP6014717

5) all the samples have a heterocharge and the photopolarization values do not depend on the voltage polarity. The results lead to the conclusion that the photoelecret effect can be produced in small single crystals as in large single crystals but that the materials employed must have a high dark specific resistance. Orig. art. has: 4 figures and 1 table.

SUB CODE: 20/ SUBM DATE: 21Sep65/ ORIG REF: 001/ SOV REF: 007/

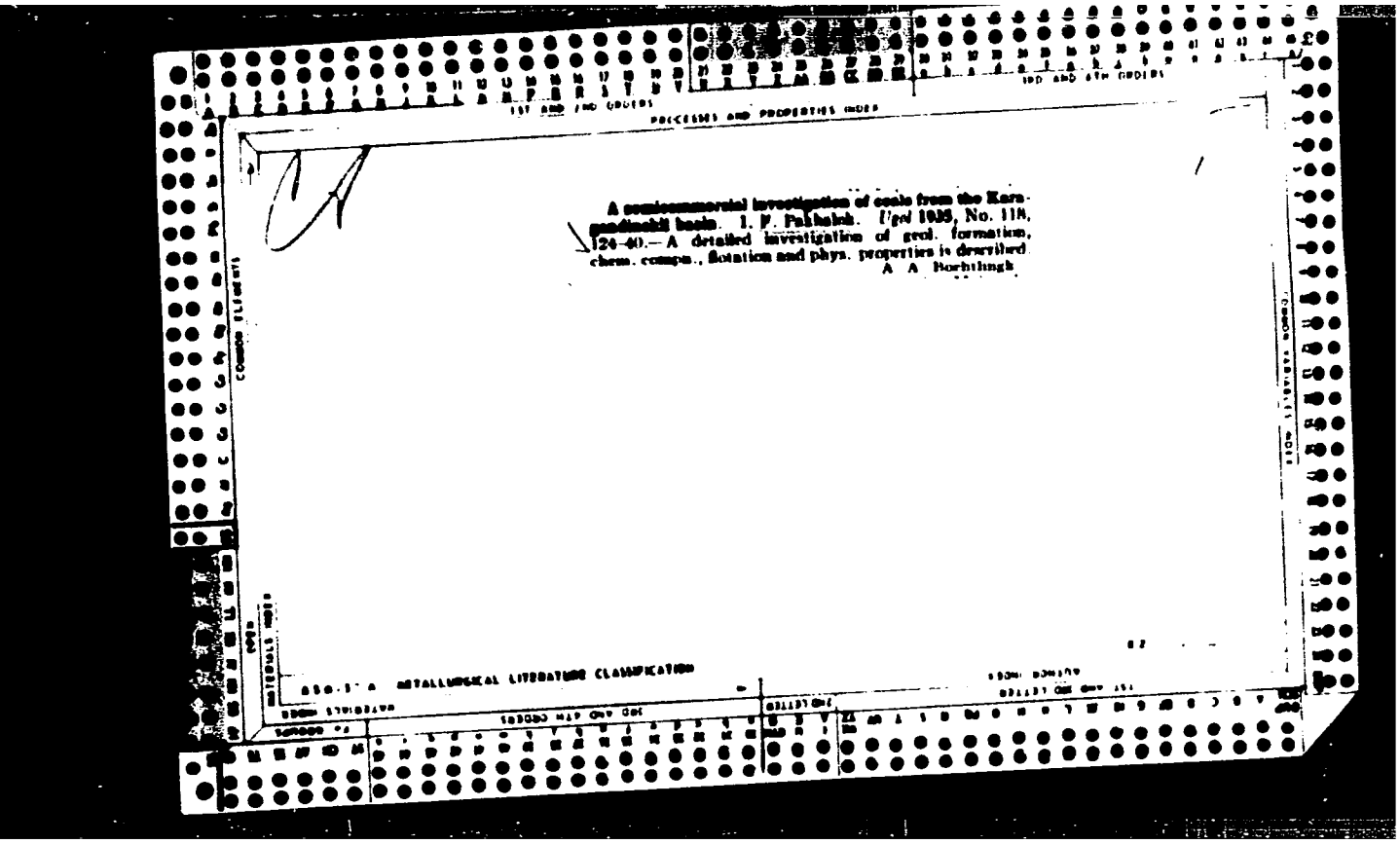
Card 2/2

PAKHALINA, T. N.

ARABADZHYAN, A.Z., kand.ekon.nauk; BADI, Sh.M., kand.ekon.nauk; BAROYAN, O.V., doktor med.nauk; BASHKIROV, A.V., kand.ekon.nauk; BUSHEV, P.P., kand. ist.nauk; GLUKHODED, V.S.; DOBROKHEYEVA, L.N., kand.filol.nauk; DOBRO-SHENKO, Ye.A., kand.ist.nauk; ZAVISTOVICH, A.A.; IVANOVA, M.N., kand. ist.nauk; IVANOV, M.S., doktor ist.nauk; IL'INSKIY, G.N., kand.ist. nauk; KISLYAKOV, N.A., doktor ist.nauk; KOMISSAROV, D.S., kand.filol. nauk; KURDOYEV, K.K., kand.filol.nauk; MOISEYEV, P.P., kand.ekon. nauk; PAKHALINA, T.N., kand.filol.nauk; PETROV, M.P., doktor geogra-ficheskikh nauk, prof.; PETROV, O.M., kand.ist.nauk; SOKOLOVA, V.S., doktor filol.nauk; TRUBETSKOY, V.V.; FARKHADIYAN, A.I., kand.ist. nauk; SHOYTOV, A.M., kand.filol.nauk; ZAKHODER, B.N., doktor istori-cheskikh nauk, prof., otvetstvennyy red.; AKHRAMOVICH, R.T., kand. ist.nauk, red.; FALINA, A.I., kand.ist.nauk, red.; KUZNETSOVA, N.A., red. izd-va; SHVEYKOVSKAYA, V.R., red. izd-va; PRUSAKOVA, T.A., tekhn. red.

[Present-day Iran; a manual] Sovremennyi Iran; spravochnik. Moskva, 1957. 715 p. (MIRA 11:2)

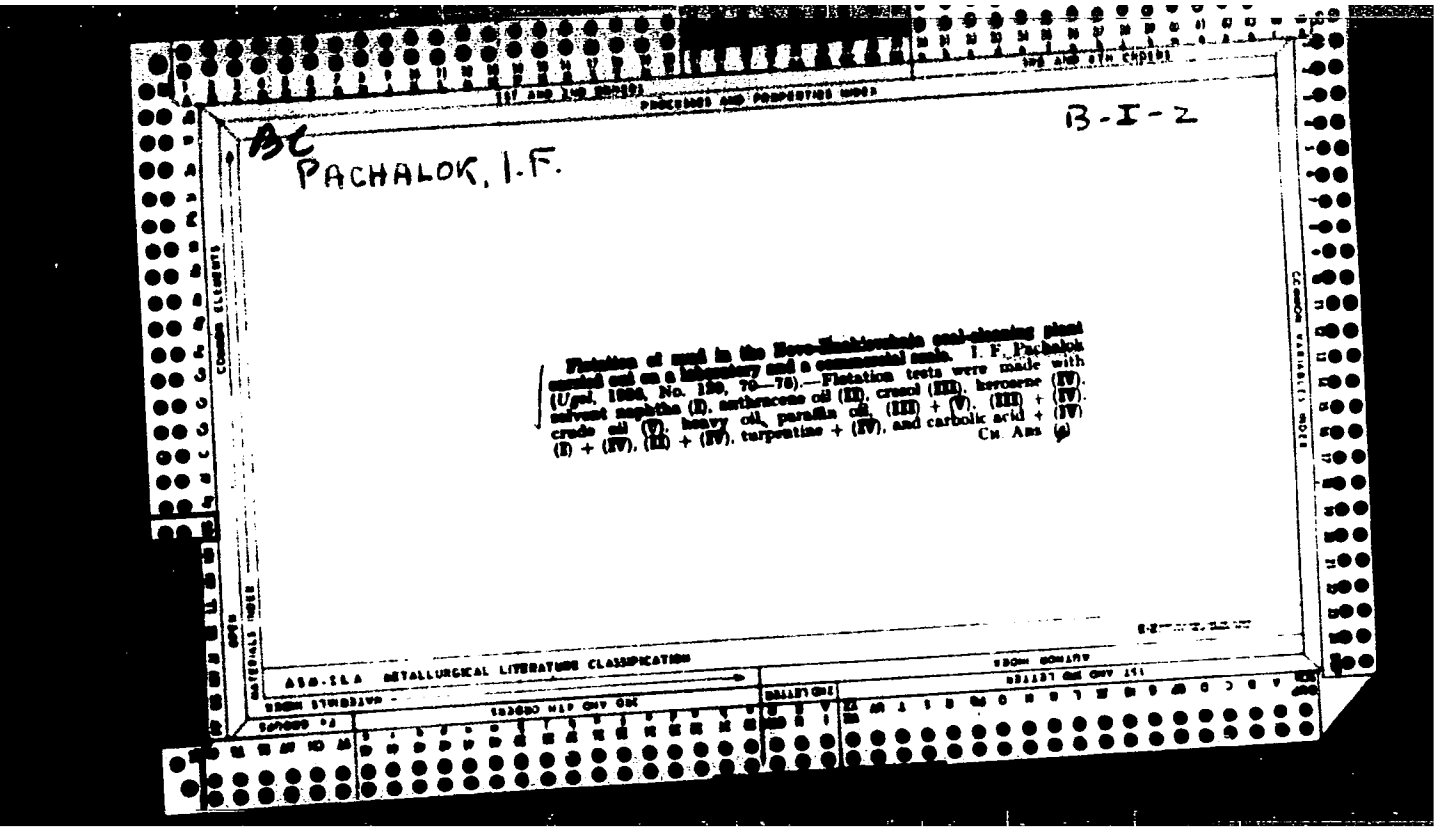
1. Akademiya nauk SSSR. Institut vostokovedeniya. (Iran)



A semicommercial investigation of coals from the Karagandinskii basin. I. F. Pakhalok. *Ugol'* 1935, No. 11/8, 124–40.— A detailed investigation of geol. formation, chem. compn., flotation and phys. properties is described.
A. A. Borbiinsk.

Laboratory and semicommercial investigations of Tkvarcheli and Tkvibuli coking coals F. N. Brazunov and I. E. Pakhbalebe. *Ugol* **1936**, No. 124, 91–101.—A detailed description of the floating of coal in $ZnCl_2$ is presented.
A. A. Boehtlingk

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

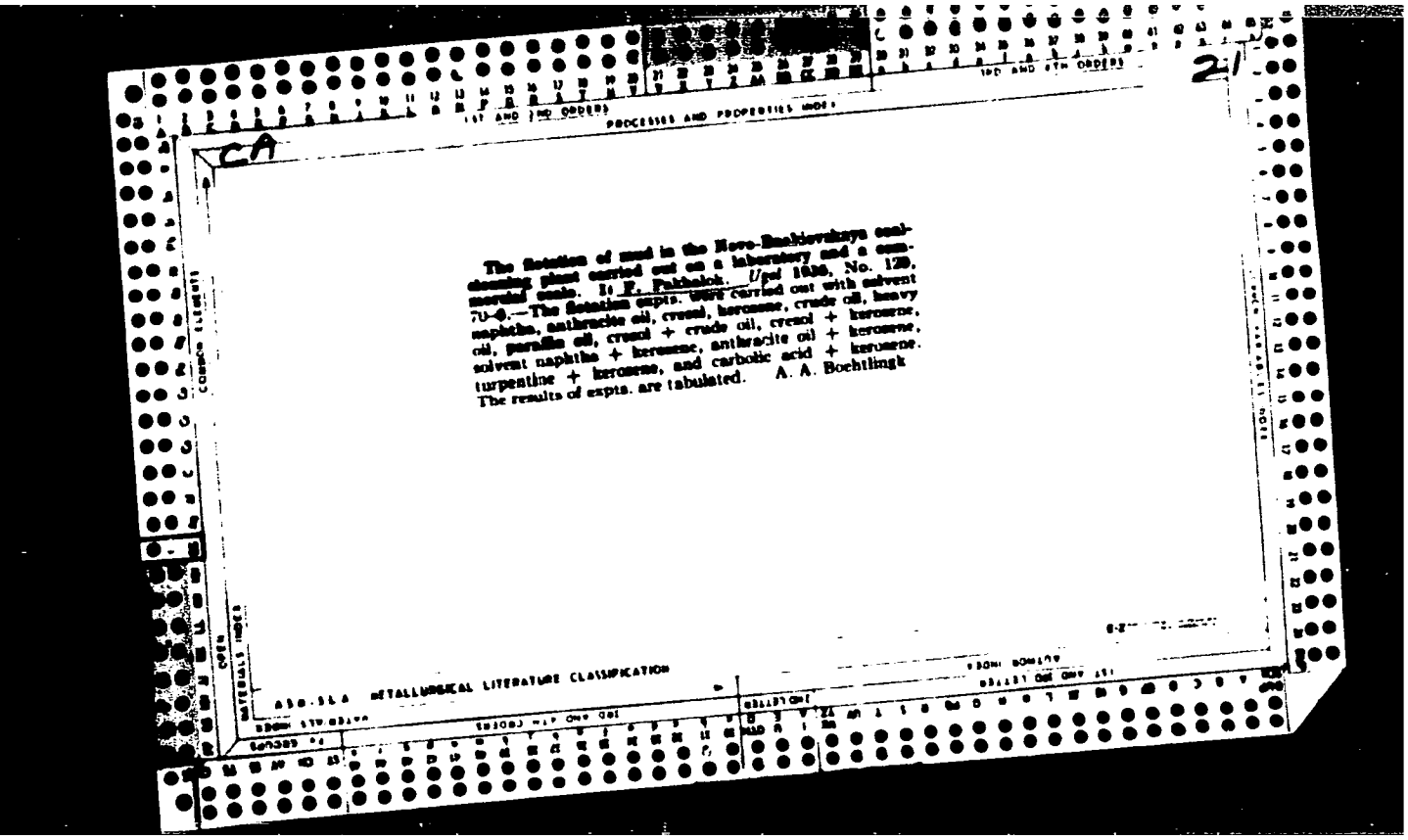


Flotation of coal in the Dzerzhinskaya coal-cleaning plant washed coal on a laboratory and a commercial scale. I. F. Pachalok (Ugol, 1956, No. 12, 76—79).—Flotation tests were made with solvent naphtha (I), anthracene oil (II), cresol (III), kerosene (IV), crude oil (V), heavy oil, paraffin oil, (III) + (V), (III) + (IV), (I) + (IV), (II) + (IV), turpentine + (IV), and carbolic acid + Cu Ans (q)

PAKHALOK, I. F.

Washer and separator in a coal enrichment factory: textbook. Moskva, Ugletekhizdat, 1952. 92 p. (54-20674)

TN816.P26



The flotation of mud in the Novo-Bakinskaya coal-cleaning plant carried out on a laboratory and a commercial scale. I. F. Fakhalok. *Ugol* 1950, No. 120, 70–9.—The flotation expts. were carried out with solvent naphtha, anthracite oil, cresol, kerosene, crude oil, heavy oil, paraffin oil, cresol + crude oil, cresol + kerosene, solvent naphtha + kerosene, anthracite oil + kerosene, turpentine + kerosene, and carbolic acid + kerosene. The results of expts. are tabulated. A. A. Boehtlingk

PAKHALOK, I. F.

Briketirovanie uglei [Briquetting coal]. Moskva, Ugletekhizdat, 1952. 175 p.

SO: Monthly List of Russian Accessions, Vol. 6 No. 11 February 1954

PAKHALOK, I.F.

USSR

Brown coal as coking material. I. F. Pakhalok and V. S. Poznanskaya. *Ugol'* 30, No. 3, 32-5(1955).—The recommended process of coking brown coal involves drying to 10% moisture, crushing to 0.5–1.0 mm. size, briquetting at 1000–2000 kg./sq. cm. pressure into 50-g. briquets, slowly raising the temp. to 350° and coking at 1000–1100°. The coke strength was in line with that of coke produced at the Far Eastern by-product coking plants. W. M. Sternberg

VNIIUgleobogashchenige

PAKHALOK, I.F.

✓1202. FUTURE DEVELOPMENT OF DESIGNS FOR HIGH PRESSURE PRESSES FOR THE BRIQUETTING OF BROWN COALS. Pakhalok, I.P. (Ugol (Coal, Moscow), Sept. 1955, 35-37). Young brown coals can be briquetted satisfactorily at 1000 to 1200 atm and old brown coals at 1600 to 1800. A great deal of air has to be removed in the process and both the application and release of pressure should be gradual. Of the three types of presses, plunger, roller and ring, the ring press meets this requirement best. Improvements in its lightness, output and ease of servicing are required. A roller press is also required for coals with high contraction. (L).

FV

All-Union Sci. Res. Inst. Coal Irrichmt (?)

PAKHALOK, I.F.

Plan for an international scientific classification of brown coal varieties. Standartizatsiia no.1:43-45 Ja-Fe '56. (MLRA 9:2)

1.Director Vsesoyuznogo nauchno-issledovatel'skogo instituta Ugleobogashcheniya.
(Lignite--Classification)

PAKHALOK, I.F.

Improving the quality of coke and using poorly sintering coals for burdens. Ugol' 31 no.5:26-28 My '56. (MLRA 9:8)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut Ugleobogashcheniya.
(Blast furnaces) (Coke)

PAKHALOK, I.F., inzh.

Immediate tasks in the field of coal preparation. Sbor. inform. po obog. i brik. ugl. no.1:5-6 '57. (MIRA 11:4)
(Coal preparation)

PAKHALOK, I.F., insh.

Jigging unsized coal with use of weighting material. Sbor. inform. po obog. i brik. ugl. no.1:16-20 '57. (MIRA 11:4)
(Coal preparation)

BRATCHENKO, B.F., red.; ZABLODSKIY, G.P., red.; BARABANOV, F.A., red.; BABOKIN, I.A., red.; BARANOV, A.I., red.; VYSOTSKIY, P.I., red.; DREMAYLO, P.G., red.; ZASADYCH, B.P., red.; ZVENIGORODSKIY, G.Z., red.; KAGAN, F.Ya., red.; LEVITSKIY, Ya.B., red.; LOTAREV, N.I., red.; MARCHENKO, M.G., red.; MITROFANOV, M.B., red.; PAKHALOK, I.F., red.; SHELKOV, A.A., red.; RYKOV, N.A., red. izd-va; IL'INSKAYA, G.M., tekhn. red.

[Safety rules for working in briquetting and preparation plants] Pravila bezopasnosti pri vedenii rabot na briketnykh i obogatitel'nykh fabrikakh. Izd.2. Obiazatel'ny dlia vsekh organizatsii i predpriiatii ugol'noi promyshlennosti. Moskva, Ugletekhizdat, 1958. 62 p. (MIRA 11:7)

1. Russia (1923- U.S.S.R.) Komitet po nadzoru za bezopasnym vedeniyem rabot v promyshlennosti i gornomu nadzoru.
(Coal preparation— Safety measures) (Briquets (Fuel))

PAKHALOK, I.F., otv.red.; GARBER, T.N., red. izd-va.; ALADOVA, Ye.I., tekhn. red.; KOROVENKOVA, Z.A., tekhn. red.

[International classification system of coals according to their types] Mezhdunarodnaia sistema klassifikatsii kamennykh uglei po tipam. Moskva, Ugletekhizdat, 1958. 51 p. (MIRA 11:12)

1. Vsesoyuznyy proyektno-konstruktorskiy i nauchno-issledovatel'skiy institut po obogashcheniyu i briketirovaniyu ugley.
(Coal)

PAKHALOK, I.F., otv.red.; MARCHENKO, M.G., inzh., red.; ZVENIGORODSKIY, G.Z., inzh., red.; BRAGINSKIY, M.G., red.; REMESNIKOV, I.D., kand.tekhn.nauk, red.; RYKOV, N.A., red.izd-va; SABITOV, A., tekhn.red.

[Briquetting of coal] Voprosy briketirovaniia uglei. Moskva, Ugletekhizdat, 1958. 318 p. (MIRA 12:5)

1. Nauchno-tekhnicheskoye gornoye obshchestvo. TSentral'noye pravleniye, Moscow. 2. Vsesoyuznyy nauchno-issledovatel'skiy institut ugleobogashcheniya (for Zvenigorodskiy). 3. Institut goryuchikh iskopayemykh AN SSSR (for Remesnikov).
(Briquets (Fuel)) (Coal)

PAKHALOK, I.F., inzh.

Substantiating the possibilities for jigging run-of-mine unsized coal in heavy suspensions. Nauch.trudy po obog.i brik.ugl. no.1: 5-21 '58. (MIRA 12:10)

(Coal preparation)

PAKHALOK, I.F., inzh.

New method of coal charge preparation before coking. Nauch.trudy po obog.i brik.ugl. no.1:91-144 '58. (MIRA 12:10)
(Coal preparation) (Coke)

PAKHALOK, I.F., inzh.; PODKUYKO, M.I., inzh.; MELIK-STEPANOVA, A.G., inzh.

Conference held in Prague on June 9-11, 1958 by a working group of experts on problems of coal preparation of the Permanent Commission on Coal in the Mutual Economic Assistance Council. Obog. i brik. ugl. no.9:91-93 '59. (MIRA 12:9)
(Coal preparation--Congresses)

PAKHALOK, I.F., inzh.; MELIK-STEPANOVA, A.G., inzh.; LABAKHUA, M.S., inzh.

Pulp thickening prior to flotation in battery hydro-cyclones in the Tkvarcheli Central Coal Preparation Plant. Obog.i brik.ugl. no.11:7-10 '59. (MIRA 13:6)
(Tkvarcheli--Coal preparation)
(Separators (Machines))

PAKHALOK, I.F., inzh.; POPUTNIKOV, F.A., inzh.; YURENKOV, N.I., inzh.

Using a greater variety of coals for coking purposes in the Donets and Kuznetsk Basins. Obog.i brik.ugl. no.14:3-14 '60. (MIRA 14:5)

(Coke)

PAKHALOK, I.F.

Proposed international classification of coke according to its type and size. Koks i khim. no.11:30-31 '61. (MIRA 15:1)

1. Gosekonomsovet SSSR.

(Coke--Classification)

PAKHALOK, I.F., inzh.

Design and structural parts of pistonless jigging machines for coal preparation. Obog.i brik. ugl. no.17:26-31 '61. (MIRA 15:2)
(Separators (Machines))

PAKHALOK, I.F., inzh.

Prospects of the over-all mechanization and automation of coal preparation. Ugol' 36 no.10:19-22 O '61. (MIRA 14:12)
(Coal preparation)
(Automatic control)

PAKHALOK, I.F., inzh.; SHKIREV, V.T., inzh.

Great attention to the construction of coal preparation plants. Shakht. stroi. 6 no.10:1-3 O '62. (MIRA 15:9)

1. Gosudarstvennyy nauchno-ekonomicheskiy sovet Soveta Ministrov SSSR.

(Coal preparation plants)

PAKHALOK, I.F., inzh.

Basic technological systems and parameters for the planning and operation of plants for coal preparation in heavy suspensions. Ugol' 37 no.3:34-37 Mr '62. (MIRA 1...
(Coal preparation plants)

LEVITSKIY, Ya.B., inzh.; PAKHALOK, I.F., inzh.

Coal quality and preparation. Ugol' 37 no.6:40-43 Je '62.
(MIRA 15:7)
(Coal preparation)

SOV/68-59-6-2/25

AUTHORS: Lazovskiy, I.M., Gryaznov, N.S., Fel'dbrin, M.G. (VUKhIN), Pakhalok, I.F., Poputnikov, F.A., Yurenkov, N.I. and Lyamin, I.N. (VNIIUglebogashcheniye)

TITLE: Preparation of Coal Blend by Air Ellutriation with Crushing of Large and Heavy Particles (Podgotovka ugol'nykh shikht vozdushnoy separatsiyey s drobleniyem krupnykh i tyazhelykh chastits)

PERIODICAL: Koks i Khimiya, 1959, Nr 6, pp 5-8 (USSR)

ABSTRACT: The use of air ellutriation in the preparation of coal blends by preferential crushing is proposed. The method consists in that a coal or a coal blend of a size 25-0 mm is air ellutriated in a pipe, so that 3-0 mm size fraction is removed by the air stream and the 25-3 mm fraction is crushed and again air ellutriated. A pilot plant installation erected for this purpose (fig) and some experimental results obtained are described. Coal blends used on one of the Eastern coking works were used for experiments. Size distributions of coal blends and quality of coke obtained by the usual crushing and preferential crushing with and without air ellutriation are shown in Tables 1 and 2. It was found that the use of air ellutriation decreases the proportion of dust

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Preparation of Coal Blend by Air Ellutriation with Crushing of Large and Heavy Particles SOV/68-59-6-2/25

(0.42 - 0 mm) by 5.8% and the distribution of ash between the individual size fraction is more uniform (ash content of larger particles is somewhat lower than that of fine fractions) and the coke obtained (on a pilot plant) was stronger than from blends prepared by preferential crushing without air ellutriation. The design and construction of a large scale experimental plant for preferential crushing with air ellutriation in a closed cycle is recommended.

Card 2/2 There are 1 figure, 2 tables and 5 Soviet references.

PAKHOLAK, I. F.

PHASE I TREASURE ISLAND BIBLIOGRAPHICAL REPORT AID 199-I

BOOK

Author: PAKHALOK, I.F. Call No. AF492785

Full Title: WASHING AND SCREENING IN COAL PREPARATION

Transliterated Title: Moyshchik i separatorshchik ugleobogatitel'noy fabriki

23 DEC 1953

Publishing Data

Originating Agency: None

Publishing House: State Scientific Technical Publishing House of Literature on the Coal Industry. ("Ugletekhizdat")

Date: 1952 No. pp.: 92 No. of copies: 3,000

Editorial Staff

Editor: None

Editor-in-Chief: None Tech. Ed.: None

Appraiser: None

Text Data

Coverage: General principles of gravitation and flotation methods of coal preparation are described. Many diagrammatic layouts and flow sheets of coal refinery and sketches, descriptions and specifications for screening, washing and settling equipment are given, along with practical data on quality of the preparation processes.

Data presented seems to differ only in minor details from American and British practices.

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Moyshchik i separatorshchik ugleobogatitel'noy fabriki AID 199-I

Purpose: Supplemental information for technical personnel in coal preparation. The book is approved by the office of Working Cadres of the Ministry of the Coal Industry as a textbook for its educational system.
Facilities: None
No. of Russian and Slavic References: None
Available: AID, Library of Congress

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PAKHALOK, Ivan Filippovich; BOLDYREV, Vasiliy Andreyevich; POPOVA, G.N., otvetstvennyy redaktor; ZAZUL'SKAYA, V.F., tekhnicheskiy redaktor; KOROVENKOVA, Z.A., tekhnicheskiy redaktor

[Briquetting coal] Briketirovanie uglei. Moskva, Ugeltekhizdat, 1957. 179 p. (MIRA 10:11)
(Briquets (Fuel))

PAKHALOK, Ivan Filippovich; RYKOV, N.A., otvetstvennyy redaktor; HAUSINSKAYA, A.A., tekhnicheskiy redaktor

[Problems in the improvement of coal preparation] Voprosy uluchsheniia tekhnologii obogashcheniia uglia. Moskva, Ugletekhizdat, 1956. 24 p. (MLRA 10:2)
(Coal preparation)

PAKHALOV, A.P.

Effect of the vacuum cooling of a cooked mass on the quality of rectified alcohol. Spirt.prom. 25 no.8:24-26 '59. (MIRA 13:3)

(Lipetsk(Lipetsk Province)--Alcohol)

PAKHALOV, A.P.; RZHECHITSKAYA, G.V.

Comparative testing of different methods for the return of the ester-aldehyde fraction to the production. Trudy TSNIISP no. 8:46-52 '59. (MIRA 14:1)
(Alcohol) (Distillation, Fractional)

GRYAZNOV, V.P.; PAKHALOV, A.P.; RZHECHITSKAYA, G.V.

Rectification of a crude sugar-beet alcohol in intermittent distillation apparatus. Spirt. prom. 25 no.6:19-22 '59.
(MIRA 12:12)
(Lipetsk--Alcohol) (Distillation, Fractional)

PAKHALOV, A.P.; POLOZHENTSEVA, N.G.

Production of rectified alcohol from sugar beets. Trudy TSNIISP no.12:25-31 '62. (MIRA 17:3)

PAKHALUYEV, Konstantin Mikhaylovich; URUSHEV, Konstantin Vasil'yevich; TOLSTYKH, P.S., redaktor; KEL'NIK, V.P., redaktor; KOVALENKO, N.I., tekhnicheskikh redaktor

[Heating furnace welder] Svarshchik nagrevatel'nykh pechei. Sverdlovsk, Gos. nauchno-tekhn. izd-vo lit-ry po chernoi i tsvetnoi metallurgii, Sverdlovskoe otd-nie, 1954. 183 p. (MLRA 8:6)
(Furnaces--Welding)

USSR/Engin
Rolling Mills
Coal

Dec 1947

"Powder Coal Heating of Rolling Furnaces," K. M. Pakhaluyev, Engr, Eastern Inst Utilization of Fuel, 5½ pp

"Stal'" No 12

Experiments over long period to determine relative advantages of using combined gas-coal powder fuel or plain coal powder fuel to heat rolling furnaces showed that coal powder was far more efficient. Use of this type of fuel permits increase of technical and economical factors during operation of these furnaces, under high temperatures necessary for melting ashes of coal used.

57T27

S/133/61/000/002/009/014
AC54/A033

AUTHORS: Pakhaluyev, K.M., Medvedeva, I.V., Andreyeva, V.V., and Kul'kova, M.N.

TITLE: Oxidation and Decarbonization of Steels in Heating Furnaces Fired With Natural Gas

PERIODICAL: Stal', 1961, No. 2, pp. 160-163

TEXT: At the zavod "Krasnyy oktyabr" ("Krasnyy octyabre" Plant) and the VNIIMT it was found that the average metal losses due to cindering amount to 2.16-2.77% of the charge weight for 6-ton ingots and to 1.36-1.88% for blooms and slabs, when heating furnaces fired with masut or natural gas are used. In order to study the processes of cindering and decarbonization and to find ways to reduce these processes simultaneously, 7 steel grades were investigated under complete and incomplete combustion of natural gas. The tests were carried out on specimens (rolled bars) 50 mm in diameter and 200 mm long. The decarbonized surface layer of the samples was removed and

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the surface was polished. Delayed cooling of the specimens was effected by fitting to one of the furnace openings a brick-lined chamber, into which technically pure nitrogen was blown. The furnace was fired with Saushinsk natural gas (CO_2: 0.25%; O_2: 0.20%; CH_4: 97.90%; C_mH_n: 0.17%; N_2: 1.48%). When the degree of oxidation of the specimen was determined, they were held in the furnace for a given time until a constant temperature was reached, then they were quickly removed and cooled in water. When both oxidation and decarbonization were investigated the specimen was put after heating in the cooling chamber filled with nitrogen. Besides, the samples were pickled (in 20%-hydrochloric acid at 45-60°C) weighed and measured. The difference in weight of the samples before and after heating gave the amount of cinder; the depth of decarbonized layer was defined by microanalysis and the excess air in a BT-(VTI)-type gas-analyzer. Altogether 82 tests were carried out with natural gas firing with excess air factors varying between 0.6 and 1.6. The samples were heated to 700-1250°C, the holding time at constant tempera-

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ture was 1/2-3 hours. The relationship between the amount of oxidized metal and the factor of excess air in the combustion products of natural gas is plotted in figs.1-2, showing that metal cinder quickly decreases with a reduction of the excess air factor when heating to 1000°C and more. If it is technologically possible to lower somewhat the very high temperatures of the metal during heat treatment, the metal losses due to cindering could be reduced considerably. Fig.4 shows that by cutting down the holding time as far as permitted by the technology, cindering can also be decreased. When the effect of air excess on decarbonization was studied, the decrease of the air excess factor was found to be accompanied by a thinner decarbonized layer. The lowering of the oxidizing effect of combustion products of natural gas were moreover observed to affect the metal and the carbon content of the metal simultaneously. It is, therefore, possible to reduce oxidation and decarbonization when heating under "non-oxidizing" conditions. From the test results it was concluded that the total excess of oxidants - as compared with the equivalent amount - quickly declines with a decreasing value of "a"; on

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an average the combustion products of gas lose their oxidizing effect at metal temperatures of 800, 1000, 1200°C (with an air excess factor of 0.54). Based on these data it is possible to attain a "non-oxidizing" heating of steel in natural-gas fired free flame furnaces. However, at very low "a" values the incomplete combustion results in a temperature decrease of the combustion products and additional heat with preheated fuel and air has to be supplied. The conditions of non-oxidizing heating for various furnaces (for instance for roller type furnaces for blooms) are determined by the following temperatures

	Bloom	Billet	Sheet
Temperature of the combustion product of the fuel, °C, ca	1400	1000	1050-1100
Calorimetric temperature of combustion, °C, ca	1870	1430	1500-1570
Temperature of air preheating, according to fig.9, °C	840	130-160	250-400

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The preheating of the air, which is necessary with the incomplete combustion of the natural gas, can be attained by conventional air heaters. Non-oxidizing heating reduces cindering and at the same time, the thickness of the decarbonized layer. However, the decrease of this layer is less considerable than the decrease in losses due to cindering. To reduce decarbonization other methods therefore, have to be applied in addition to incomplete combustion, as, e.g., coating with siliceous slag (Ref.5), A.A. Aleksandrov and Yu.A. Pan'kov: The Application of Coatings to Protect Steels from Oxidation and Decarbonization During Heating; in the collection: Processing of Metals and Heat Treatment; annex to Stal', 1959, pp. 214-240) or by blowing lithium carbonate into the furnace to form a protecting coating on the metal surface (Ref.6: F. Neuberger, et al. Fertigungstechnik, 1957, Vol.7,No.10 and Ref.7: H.W. Steading: Industrieblatt, 1958, Vol.58,No.4). There are 9 figures and 7 references (4 Soviet and 3 Non-Soviet).

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Oxidation and Decarbonization of Steels in Heating Furnaces Fired With Natural Gas

ASSOCIATIONS: VNIIMT , Zavod "Krasnyy Oktyabr" ("Krasnyy Oktyabr" Plant)

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