ZOMMER, Yu.

Striving for improved navigable conditions. Rech. transp. 22 no.9:47-48 S '63. (MIRA 16:10)

1. Nachal'nik Yeniseyskogo basseynovogo upravleniya puti.

DEDUCHENKO, M., inzh.; ZOMMER, Yu., inzh.; LISOVSKIY, P., inzh.

Some characteristics of dredging operations in tailraces of hydroelectric power stations. Rech. transp. 19 no. 2:36-38 F '60. (MIRA 14:5)

(Hydroelectric power stations) Dredging)

ZON, B.Ya.

Draft standard for through holes. Standartizatsiia 29 no.2:25 F '65. (MIRA 18:4)

BUBES, Yu.V., inzh.; ZON, V.M., inzh.

Use of arc screens for the classification of sand and gravel materials. Stroi. mat. 9 no.7:11-13 Jl '63. (MIRA 16:11)

ZONDA, Maria, dr.

Diagnostic value of the time of bromsulphalein secretion. Orv. hetil. 101 no.10:337-339 Mr '60.

1. Budapesti Orvostudomanyi Egyetem, I. sz. Belklinika.
(BILIARY TRACT dis)
(PHENOLPHTHALEINS)
(DUODENUM)

ZONDA, P.

ZONDA, P. Possibilties of technical improvement in deep boring on the Alfold. p. 175

Vol. 11, no. 3, March 1956
BANYASZATIL LAPOK
TECHNOLOGY
Budapest, Hungary

SO: East Eurpean accession Vol. 6, no. 3, March 1957

ZONENASHVILI, I.A.

Solution of the fundamental boundary value problems in the two-dimensional theory of elasticity. Soob. AN Gruz. SSR 29 no.1:9-16 Jl '62. (MIRA 18:5)

1. Tbilisskiy gosudarstvennyy universitet. Submitted February 13, 1961.

ZONENASHVILI, I.A.

A problem concerning the bending of an elastic plate. Soob. AN Gruz. SSR 31 no.1:23-30 Jl '63. (MIRA 17:7)

1. Tbilisskiy gosudarstvennyy universitet. Predstavleno akademikom N.P. Vekua.

ZONENBERG, M. (Kiyev)

Produce more roofing tiles. Prom. koop. 12 no.7:17-19 Jl '58.
(MIRA 11:8)

1.Glavnyy inzhener otdela stroymaterialov Ukrpromsoveta.
(Tiles, Roofing)

ZHUKOV, A.V.; GOROKHOVSKIY, A.D.; DAMASKIN, S.A.; RUDENKO, P.M.; ZONENBERG, M.F.; DIKOVA, S.A.; GAYDAY, V.K., red.

[Production of large wall elements from ceramics] Proizvodstvo krupnykh stenovykh konstruktsii iz keramiki. Kiev, Budivel'nyk, 1965. 33 p. (MIRA 18:8)

1. Moscow. Gosudarstvennyy nauchno-issledovatel'skiy institut stroitel'nykh materialov i izdeliy.

[illegible], A.V.; [illegible], F.M.; ZELENBERG, M. Ye.; [illegible], S.I.

Plastic formation of efficient ceramic stone from poor raw materials. Stroi. mat., det. i izd. no. 2:21-31 '56.
(MLRA 9:1)

1. Gosudarstvennyy nauchno-issledovatel'skiy institut stroitel'nykh materialov i izdeliy, Kiyev.

TEREKHOV, A.P., kand.tekhn.nauk; ZONENBERG, R.M., inzh.

Cleaning sugar beet roots by the vibration method. Trakt. i sel'khozmash. 31 no.10:32-33 O '61. (MIRA 14:12)

1. Ukrainskiy nauchno-issledovatel'skiy institut mekhanizatsii i elektrifikatsii sel'skogo khozyaystva.
(Sugar beets)

ZONENKO, T.M.; FROLOV, V.A., gornyy inzh.

Progressive operating practice at "Sorskiy" Mine.
Gor. zhur. no.6:6-11 Je '62. (MIRA 15:11)

1. Direktor Sorskogo gorno-obogatitel'nogo kombinata (for Zonenko).

(Krasnoyarsk Territory--Molybdenum)

AUTHOR: Zonenko, V.F.

TITLE: Device for Separating Cut Strips of Material and Feeding Them to Reel Drums (Ustroystvo dlya razdeleniya i napravleniya narezayemykh polos materiala k namotochnym barabanam)

SOV/19-58-6-60/685

PERIODICAL: Byulleten' izobreteniy, 1958, Nr 6, p 17 (USSR)

ABSTRACT: Class 7b, 5$_{01}$. Nr 113660 (584250 of 7 Oct 1957). Submitted to the Committee for Inventions and Discoveries at the Ministers Council of USSR. A device consisting of rollers for receiving strips after cutting, rollers with discs for separating adjacent strips, and a tracker with a command-instrument for control puposes: this design has guides for directing adjacent strips in two streams to the upper and the bottom reel drums; these guides reduce the over-all area occupied by the installation and improve the quality of the strips.

Card 1/1

ACC NR: AP6032534 SOURCE CODE: UR/0413/66/000/017/0141/0141

INVENTOR: Tselikov, A. I.; Rozanov, B. V.; Nistratov, A. F.; Gol'man, L. D.; Maksimov, L. Yu.; Pobedin, I. S.; Fridman, A. Z.; Kitain, R. S.; Kurovich, A. N.; Nadtochenko, A. F.; Kaganovskiy, F. I.; Kozhevnikov, V. F.; Zonenko, V. V.

ORG: none

TITLE: Hydraulic press reinforced with wire wrapping. Class 58, No. 185696 [announced by the All-Union Scientific Research Institute for the Planning and Design of Metallurgical Machinery (Vsesoyuznyy nauchno-issledovatel'skiy i proyektno-konstruktorskiy institut metallurgicheskogo mashinostroyeniya)]

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 17, 1966, 141

TOPIC TAGS: hydraulic press, reinforced hydraulic press, HYDRAULIC EQUIPMENT, METAL PRESS

ABSTRACT: This Author Certificate introduces a hydraulic press reinforced (see Fig. 1) with wire wrapping. The press includes a cylinder, housing consisting of upper end lower crossmembers and columns with a concave oval-shaped outside surface which makes it possible to wind a reinforcing band or wire around the housing. To improve the technical and economic characteristics and the reliability of the press at the same main parameters, the housing is provided with stiffening ribs located

Card 1/2 UDC: 621.226

ACC NR: AP6032534

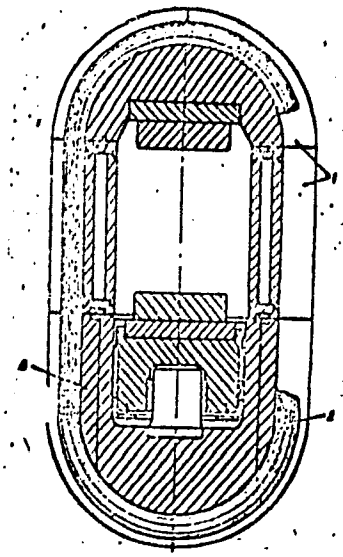


Fig. 1. Hydraulic press reinforced with wire wrapping

1 - Stiffenning ribs; 2 - wrapping; 3 - lower crossmember.

between the wrapping, and the lower crossmember of the press is laminated and serves as a hydraulic cylinder. Orig. art. has: 1 figure.

SUB CODE: SUBM DATE: 20Aug64/

Card 2/2

GOLDENBERG, N., Dr.; ZONENREICH, Olga, dr.

Study of a case of paroxysmal ventricular fibrillation.
Med. int., Bucur. 8 no.3:431-444 July 56.

1. (Clinica a IV-a mediciala- I.M.F. Iasi).
(VENTRICULAR FIBRILLATION, case reports)
paroxysmal ventric. fibrillation)

USSR/Human and Animal Physiology - (Normal and Pathological). T
Blood Circulation. Heart.

Abs Jour : Ref Zhur Biol., No 4, 1959, 17433

Author : Zonenreykh, S.
Inst : -
Title : The Influence of Higher Regions of the Brain on Electric Activity of the Heart.

Orig Pub : Klinich. meditsina, 1957, 35, No 9, 68-73

Abstract : 40 patients with hypertension and 20 with hyperthyreosis with elevation of blood pressure were investigated. After introduction of 0.2 g of Na amytal (internally) or 2.5 g of chloralhydrate (enema), an increase of voltage of the T-wave, a leveling off of the decreased St segment, a decrease of the P-wave, lower frequency of heart beats, and a change of QRS voltage (increase or decrease) were noted. The introduction of these preparations may be utilized as a functional test.

Card 1/2

USSR/Human and Animal Physiology - (Normal and Pathological). T
Blood Circulation. Heart.

Abs Jour : Ref Zhur Biol., No 4, 1959, 17433

The obtained results confirm the influence of the higher regions of the brain on the electric activity of the heart.

Card 2/2

ZONENSHAYN, L.P.; SEORSHCHIKOV, I.M.

Petrofabric analysis of some folds in the western Verkhoyansk Range. Geotektonika no.4:92-105 Jl-Ag '65.

(MIRA 18:8)

1. Vsesoyuznyy aerogeologicheskiy trest Gosudarstvennogo geologicheskogo komiteta SSSR, Moskva.

ZONENSHAIN, Lev Pavlovich; BOGDANOVA, A.A., red.; BASHMAKOVA, Z.I., red.izd-va; BYKOVA, V.V., tekhn. red.

[Tectonics of the Western Sayan Mountains] Tektonika Zapadnogo Saiana. Pod red.A.A.Bogdanova. Moskva, Gosgeoltekhizdat, 1963. 110 p. (MIRA 16:10)
(Sayan Mountains--Geology, Structural)

ZONENSHAYN, L.P.

Unconformities within the Verkhoyansk complex. Izv. AN SSSR. Ser. geol. 29 no.4:90-94 Ap'64. (MIRA 17:5)

1. Vsesoyuznyy aerologicheskiy trest Gosudarstvennogo geologicheskogo komiteta SSSR, Moskva.

ACC NR: AP6034490 SOURCE CODE: UR/0210/66/000/006/0050/0059

AUTHOR: Zonenshayn, L. P.; Natapov, L. M.; Uflyand, A.K.

ORG: All-Union Aerogeological Trust, Moscow (Vsesoyuznyy aerogeologicheskiy tres.)

TITLE: Structure of the Aldan branch of the Priverkhoyansk foredeep

SOURCE: Geologiya i geofizika, no. 6, 1966, 50-59

TOPIC TAGS: geologic exploration, anticline, geologic survey, foredeep, tectonics

ABSTRACT: The structure of the Aldan branch of the Priverkhoyansk foredeep is described. Steep flexures alternating with gently sloping echelon brachysynclines characterize the boundary region between the Verkhoyansk folded region and the Priverkhoyansk foredeep. The limiting folds are oriented at a steep angle to the foredeep strike, plunging east-southeast. These folds can be traced within the inner zone of the foredeep. A system of narrow anticlines, separated by broad synclines is also found in the inner zone of the foredeep. The entire Verkhoyansk complex consists of Permian-Cretaceous formations. The outer zone of the foredeep is composed of Jurassic and Cretaceous formations superposed on a Lower Paleozoic basement. The inner and

Card 1/2

UDC: 553.98:551.70+551.24(571.56)

ACC NR: AP6034490

outer zones are separated by a marginal suture-type deep-seated fault. Orig. art. has: 1 figure

SUB CODE: 08/ SUBM DATE: 23Apr64/ ORIG REF: 012/ OTH REF: 006

Card 2/2

ZONENSHAYN, L. P.

Dissertation defended the Geological Institute for the academic Degree of Candidate of Geologo-Mineralogical Sciences:

"Tectonics of Western Sayan,"

Vestnik Akad Nauk No. 4, 1963, pp. 119-145

ZONENSHAYN, L.P.

Lower Cretaceous coal-bearing molasse in the Verkhoyansk piedmont. Sov. geol. 7 no.10:154-155 O '64. (MIRA 17:11)

1. Aerogeologicheskiy trest.

ZONENSHAYN, L.P.

Tectonics and the analysis of folding in the Verkoyansk Range. Geotektonika no.2:58-78 Mr-Ap '65. (MIRA 18:5)

1. Vsesoyuznyy aerogeologicheskiy trest Gosudarstvennogo geologicheskogo komiteta, SSSR, Moskva.

ZONENSHAYN, L.P.; BARTEL'S-USPENSKAYA, I.A.; SAFRONOV, V.S.; NEYMAN, V.B.; GENDLER, V.Ye.; CHURIKOV, V.S.; YEFREMIN, N.I.; KOGAN, B.S.; YAKOVLEVA, M.N.; LANGE, O.K.; KABANOV, G.K.; KUZNETSOVA, K.I.; SINITSYNA, I.N.; SMIRNOVA, T.N.; VENKATACHALAPATI, V.; MASLAKOVA, N.I.; BELOUSOVA, Z.D.; YAKUBOVSKAYA, T.A.; YURINA, A.L.; RYBAKOVA, N.O.; MOROZOVA, V.G.; BARASH, M.S.; FONAREV, V.I.; NIKONOV, A.A.

Activity of the Geological Sections of the Moscow Naturalists' Society. Biul. MOIP. Otd. geol. 39 no.6:127-131 N-D '64. (MIRA 18:3)

BELOSTOTSKIY, I.I.; ZONENSHAYN, L.P.; KRASIL'NIKOV, B.N.; KUDRYAVTSEV, G.A.
MOSSAKOVSKIY, A.A.; POZHARISKIY, I.F.; KHERASKOV, N.N.

Division of the Altai-Sayan mountainous area into tectonic districts.
Biul.MOIP.Otd.geol. 34 no.4:150-152 Jl-Ag '59. (MIRA 13:8)
(Altai Mountains--Geology, Structural)
(Sayan Mountains--Geology, Strudtural)

ZONENSHAYN, L.P.

Characteristics of the tectonic development of the Western Sayan Mountains. Geol. i geofiz. no.4:22-35 '61. (MIRA 14:5)

1. Tubinskaya ekspeditsiya Vsesoyuznogo Aerologicheskogo tresta, Moskva.

(Sayan Mountains--Geology, Structural)

ADAMOVICH, A.F.; ZONENSHAYN, L.P.; SULIDI-KONDRAT'YEV, Ye.D.; UFLYAND, A.K.

New data on the stratigraphy of sandy-shale series of the Western Sayans. Biul. MOIP. Otd.geol. 33 no.4:144 Jl-Ag '58.
(Sayan Mountains--Geology, Stratigraphic) (MIRA 11:11)

ZONENSHAYN, L.P.

Age and form of granitoid instrusions in the middle Agul Valley in the Eastern Sayan Mountains. Trudy VAGT no.2:96-97 '56.
(Agul Valley--Rocks, Igneous)

SOV/5-58-4-17/43

AUTHORS: Adamovich, A.F., Zonenshayn, L.P., Sulidi-Kondrat'yev, Ye.D., Uflyand, A.K.

TITLE: New Data on the Stratification of the Sandy Clay Strata of the Western Sayan (Novyye dannyye po stratigrafii peschano-slantsevykh tolshch Zapadnogo Sayana)

PERIODICAL: Byulleten' Moskovskogo obshchestva ispytateley prirody, Otdel geologicheskiy, 1958, Nr 4, p 144 (USSR)

ABSTRACT: This is a summary of a report given by the author at a meeting of the Moscow Society of Naturalists on 11 March 1958. In 1957, the authors of this article, together with O.A. Semenova, A.E. Kalis and others, tried to analyze the stratification of the sandy clay strata of the Western Sayan. They reached the conclusion that there are three different series; the lower series consists of the Syrtikhol'skaya and Urskaya formations; the second series of a frequent, sometimes rhythmic alternation of green sandstones, siltstones and argillites; the third series, of the Shignetskaya formation. The names

Card 1/2

SOV/5-58-4-17/43

New Data on the Stratification of the Sandy Clay Strata of the Western Sayan

of the following scientists are also mentioned: G.M. Vladimirskiy, A.G. Sivov, I.K. Bazhenov, N.A. Batov, as having worked in this field.

1. Geology 2. Earth---Structural analysis 3. Sand--Geology
4. Clays--Geology

Card 2/2

BELOSTOTSKIY, I.I.; ZONENSHAYN, L.P.; KRASIL'NIKOV, B.N.; KUDRYAVTSEV, G.A.
MOSSAKOVSKIY, A.A.; POZHARISKIY, I.F.; KHERASKOV, N.N.

Formation and tectonic regions of the Altai-Sayan folded region.
Biul. MOIP. Otd. geol. 34 no.6:3-22 N-D '59. (MIRA 14:3)
(Altai Mountains--Folds (Geology))
(Sayan Mountains--Folds (Geology))

ZONENSHAYN, L.P.; KUDRYAVTSEV, G.A.; MOSSAKOVSKIY, A.A.

Analysis of Paleozoic geological formations in the eastern Altai-Sayan area and their tectonic features. Geol. i geofiz. no.12:13-23 '60. (MIRA 14:5)

1. Vsesoyuznyy aerogeologicheskiy trest, Moskva.
(Altai Mountains—Geology)
(Sayan Mountains—Geology)

ZONIK, Z.

POLAND

Organizational Development in Communications --- Warsaw, Gospodarka Lacznosci, Jan 56.

ZONIN, A.

ZONIN, A. Kapitan "Diany"; istoricheskaia povest'. Moskva, Voennoe izd-vo, 1946. 137 p. DLC: Unclass.
CU MH NNC NjP

SO: LC, Soviet Geography, Part I, 1951, Uncl.

ZONENREICH S.

STRAT, C. Prof.; ZONENREICH, S., Ir.; DRAGAN, M., Dr.; MARDARE, Gh., Dr.

Adrenal cortex hormone therapy of chronic liver diseases. Med. int., Bucur. 9 no.7:1089-1094 July 57.

1. Clinica a II-2 medicala, Institutui de medicina, Iasi.
(LIVER DISEASES, therapy
adrenal cortex hormones)
(ADRENAL CORTEX HORMONES, ther. use
liver dis., chronic)

ZONENREICH, S.

Electrocardiographic changes caused by sedative drugs in hypertensive and hyperthyroid patients. Med. int., Bucur. 9 no.9:1422-1432 Sept 57.

1. Clinica a II-a medicala, Iasi.
(HYPERTENSION, therapy
amobarbital & chloral hydrate, eff. on ECG)
(HYPERTHYROIDISM, therapy
same)
(ELECTROCARDIOGRAPHY, eff. of drugs on
amobarbital & chloral hydrate in ther. of hypertension & hyperthyroidism)
(CHLORAL HYDRATE, ther. use
hypertension & hyperthyroidism, eff. on ECG)
(AMOBARBITAL, ther. use
same)

ZONENBRIKH, S.

ZONENBRIKH, S. (Rumyniya)

Effect of higher cerebral centers on the electrical activity of the heart. Klin.med. 35 no.9:68-73 S '57. (MIRA 10:11)

1. Iz vtoroy kliniki vnutrennikh bolezney Yasskogo meditsinskogo instituta Rumynskoy Narodnoy Respubliki.

(ELECTROCARDIOGRAPHY, eff. of drugs on amobarbital & chloral hydrate in hypertension & hyperthyroidism)
(AMOBARBITAL, eff. on ECG, with chloral hydrate in hypertension & hyperthyroidism)
(HYPERTENSION, physiol. ECG, eff. of amobarbital & chloral hydrate)
(HYPERTHYROIDISM, physiol. same)
(CHLORAL HYDRATE, eff. on ECG, with amobarbital in hypertension & hyperthyroidism)

ZONIN, A.A.

USSR / Cosmochemistry, Geochemistry, Hydrochemistry, D

Abs Jour : Ref Zhur - Khimiya, No 3, 1957, No 7876

Author : Fesyenko, N.G., and Zonin, A.A.
Inst : Not given
Title : On the Chemical Composition of the Water in the Main Don and Lower Don Canals.

Orig Pub : Gidrokhim. Materialy, 1955, No 25, 17-175

Abstract : During the first months of operation, the water in the canals was characterized by a higher mineral content (511 mg/liter) relative that of the Tsimlyan Reservoir; this increase in mineralization was caused by the leaching of the soluble salts from the canal beds. Since August 1952, the ion content of the canal waters has not changed over the course of the canals. Over the seasons the ion content of the canal waters changes in the same order as that of the lower part of the Tsimlyan Reservoir. The water which flows into the canals from the Tsimlyan Reservoir is low in minerals con-

Card : 1/2

ZONIN, Aleksandr

"2,000 Miles Under the Sea; on a Voyage with a Crew of the Decorated Submarine L-3," (Dve tysyachi mil'pod vodoy). Moscow, Voyenno-morskoye, 1944. 56p.

1. World War, 1939-1945 - Naval Operations - Submarine.
2. World War, 1939-1945 - Personnel narratives, Russian.

ZONIS, E.S.; PEREKALIN, V.V.

Synthesis of dinitrodienes. Zhur. prikl. khim. 33 no.6:1427-1428 Je '60. (MIRA 13:8)

(Hexadiene) (Malonic acid)
(Butane) (Aldehydes)

5.3610

82565
S/080/60/033/06/06/006

AUTHORS: Zonis, E. S., Perekalin, V. V.

TITLE: Synthesis of Dinitrodienes

PERIODICAL: Zhurnal prikladnoy khimii, 1960, Vol. 33, No. 6, pp. 1427-1428

TEXT: The synthesis of non-conjugated dinitrodienes, in which the nitrovinyl radicals are separated by methylene groups, was carried out by the authors for the first time. The condensation of 1,4-dinitrobutane with aromatic aldehydes in the presence of ethylenediamine or ammonium acetate in glacial acetic acid led to the formation of various 1,6-diaryl-2,5-dinitrohexadienes-1,5. To one of them sodiumdimethylmalonate was added with the formation of the methyl ester of the pertaining dinitrotetracarboxylic acid. In the condensation of the disodium salt of 1,4-dinitrobutane with paraform, 2,5-dinitrohexadiol-1,6 was separated which was converted by acetylation and subsequent deacetylation into 2,5-dinitrohexadiene-1,5 with a m. p. of 79-81 (heptane). The structural formulae of the substances synthesized, their melting points, yields and chemical compositions are given. There is 1 table and 3 Soviet references.

SUBMITTED: February 10, 1960

Card 1/1

PEREKALIN, Vsevolod Vasil'yevich; Prinimali uchastiye: SOPOVA, A.V.; LERNER, O.M.; ZONIS, E.S.; ZOBACHEVA, M.M.; KVITKO, S.M.; BASKOV, Yu.V.; KAPLIN, S.V.; POLYANSKAYA, A.S.; PADVA, G.D.; ZONIS, S.A., red.; POMKINA, T.A., tekhn. red.

[Unsaturated nitro compounds] Nepredel'nye nitrosoedineniia. Leningrad, Gos. nauchno-tekhn. izd-vo khim. lit-ry, 1961. 335 p. (MIRA 14:7)
(Nitro compounds)

5(3)

AUTHORS: Rudkovskiy, D. M., Ketslakh, M. M., Zonis, E. S.

SOV/79-29-6-31/72

TITLE: Common Synthesis of Alcohols and Ketones From Aldehydes of the Oxo-synthesis and Secondary Alcohols (Sovmestnoye polucheniye spirtov i ketonov iz al'degidov oksosinteza i vtorichnykh spirtov)

PERIODICAL: Zhurnal obshchey khimii, 1959, Vol 29, Nr 6, pp 1914 - 1920 (USSR)

ABSTRACT: In the present paper a synthesis of the aliphatic alcohols C_6-C_8 and ketones, of acetone and methyl-ethyl-ketone was devised. The yields were high and the consumption of aluminum alcoholates, which were used as activators in the reaction of the cobalt carbonyls, was low. As initial products for the reduction hydrogen carbon solutions were used, which were obtained via the oxo-synthesis and contained 28-36% aldehydes C_6-C_8. The reduction was carried out in the presence of isopropylate and secondary aluminum butylate in the corresponding alcohol solution. It was shown for the first time that the cobalt carbonyls activate the reduction process. Their effect was more intense when using directly the aldehydes of the oxo-

Card 1/2

synthesis than with an artificially composed mixture. The regular addition of the aldehydes to the solution of aluminum alcoholates as well as the continuous distilling-off of the ketones formed favor the formation of the alcohols and inhibit the condensation of the aldehydes. The optimum laboratory conditions for the reduction of the aldehydes C_6-C_8 in the presence of the aluminum isopropylate were determined on which the yield in alcohols (C_6-C_8), with respect to the reacted aldehyde, was 94% and that in acetone 95%. The aluminum consumption was there 1.4-3%, related to the reacting alcohols and the acetone. The use of the secondary aluminum butylate resulted in likewise high yield in alcoholates and methyl-ethyl-ketone in the case of a solution in secondary butyl alcohol. There are 1 figure, 3 tables, and 13 references, 4 of which are Soviet.

ASSOCIATION: Leningradskiy nauchno-issledovatel'skiy institut po pererabotke nefti i polucheniyu iskusstvennogo zhidkogo topliva (Leningrad Scientific Research Institute for Petroleum Refining and Production of Artificial Liquid Fuels)

SUBMITTED: May 12, 1958

ZONIS, E.S.; LERNER, O.M.; PETUKALIN, V.V.

Synthesis of dinitrotrienes. Zhur.prikl.khim. 34 no.3:711-712 Mr '61. (MIRA 14:5)

(Olefins)

ZONIS, L.S.; KHALETSKIY, A.M.; PESIN, V.G.

Synthesis and study of 1-[p-β-diethylaminoethoxyphenyl)-p-tolyl-2-p-chlorophenyl] ethanol. Zhur.ob.khim. 33 no.10:3141-3142 O '63. (MIRA 16:11)

1. Leningradskiy khimiko-farmatsevticheskiy institut.

ZONIS, L.S.; KHALETSKIY, A.M.; PESIN, V.G.

Synthesis and study of some 5,5'-dialkylaminoalkyl derivatives of barbituric and thiobarbituric acids. Zhur.ob.khim. 31 no.9:3004-3006 S '61. (MIRA 14:9)

1. Leningradskiy khimiko-farmatsevticheskiy institut.
(Barbituric acid)

ZONIS, M., polkovnik

Tactical and special training as an important milestone in the training of communications men. Voen. svyaz. 16 no. 6:11-13 Je '58. (MIRA 11:7)

(Military education)

ZONIS, M., polkovnik

Organization of exercises for radio operators. Voen. vest. 40 no.11:84-85 N '60. (MIRA 14:11)
(Radio, Military--Study and teaching)

SKVIRSKAYA, Ye.S.; ZONIS, M.L.

Prescription filling in pharmacies of the Kiev region. Aptech. delo, Moskva 2 no.2:28-30 Mar-Apr 1953. (CLML 24:3)

1. Of the Department of the Technology of Medicinal Forms of Kiev Institute for the Advanced Training of Pharmacists (Director — Pharmacist D. S. Tkachenko), Ministry of Public Health Ukrainian SSR. 2. Analysis of types of preparations used.

CA

10

Investigations in the field of vitamin A synthesis. Yu. S. Zal'kind, S. Zonis and N. Blokhin. *Compt. rend. acad. sci. U. R. S. S.* 2, 57-60 (in German 61-3) (1935).—β-Ionone and the Mg deriv. of vinylacetylene were heated on a H_2O bath for 3 days till the odor of ionone disappeared. After the usual treatment a viscous liquid, *3-methyl-1-(2',6',6'-trimethyl-1'-cyclohexenyl)-1,6-heptadien-4-yne-3-ol* (I), $Me_2C.(CH_2)_3.CMe.CCH:CHCMe(OH)C.CCH:CH_2$, b_4 133-45°, d_{20} 0.9818, n_D^{20} 1.5384, was obtained. This was reduced by almost the calcd. vol. of H_2 and a Pd catalyst to *β-(2,2,6-trimethylcyclohexyl)ethylmethylbutylcarbinol*, $Me_2C.(CH_2)_3.CHMe.CH(CH_2)_2CMe(OH)(CH_2)_3CH_3$, b_4 125-9°, which was identified by oxidation with $K_2Cr_2O_7$. This gave tetrahydroionone (II) and $PrCO_2H$. The latter appeared to be contaminated with a little trimethylcyclohexylacetic acid. II was identified by comparison with *tetrahydroionone*, b_4 112-15°, d_4^0 [illegible], d_4^{20} 0.9224, n_D^{20} 1.4768 (*semicarbazone*, m. 165-6.5°), obtained by hydrogenating ionone with H_2 and Pd. While I had many of the chem. characteristics of vitamin A, tests on rats showed that it was not a vitamin.

John E. Miltery

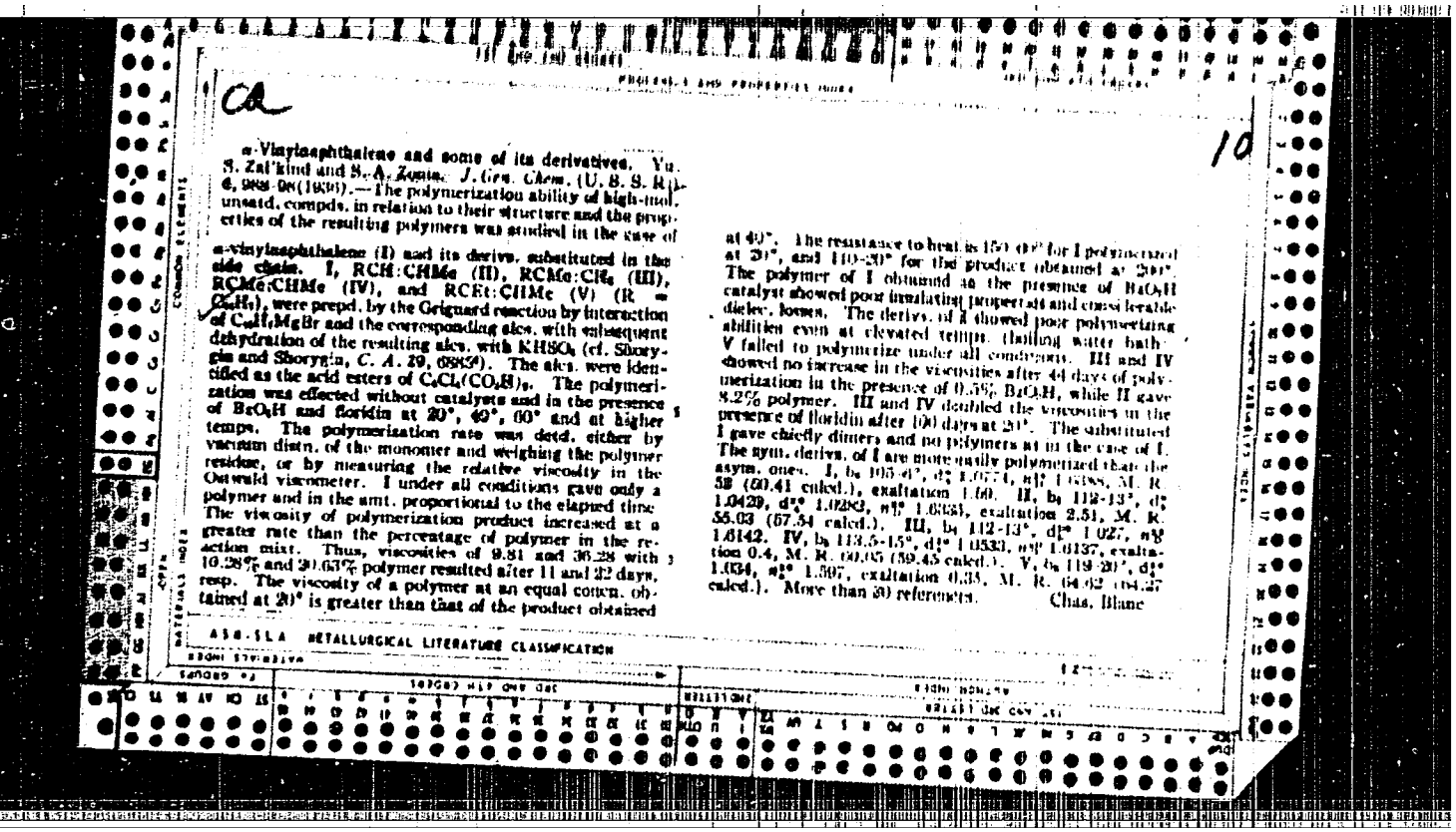
ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

PROCESSES AND PROPERTIES INDEX

Production of acid esters of tetrachlorophthalic acid, and their application to the identification and isolation of alcohols. V. K. Teterin and S. A. Zonis. *J. Gen. Chem.* (U. S. S. R.) 6, 658-62(1936). Most primary and secondary alcs. give with $Cl_4C_6(CO_2H)_2$ (I) 100% acid esters without the aid of a catalyst by refluxing I with a slight excess of an alc. (0.3-1 g.) in 2-5 parts of C_6H_6 or PhMe and allowing the H_2O to distil off. At the end of the reaction the solvent is distd. off and the ester is crystd., preferably with the addn. of little petr. ether. The Et ester is best obtained with a larger excess of alc. (2-3 parts) without a solvent with subsequent distn. of the H_2O. The esterification of primary alcs. is effected in 2-3 hrs. and that of secondary alcs. in 4-8 hrs. The esterification of $PhCH_2OH$ consumed over 10 hrs., indicating the retarding effect of the aromatic radical. Most of these esters are more easily crystd. and have higher m. pt. than the corresponding esters of other acids. The esters of lower alcs. decompose on heating at lower temps. into the alc. and anhydride, while others give unsatd. hydrocarbons, H_2O and the anhydride. The latter reaction can be used for the conversion of alcs. into the corresponding unsatd. hydrocarbons with the aid of tetrachlorophthalic anhydride as a catalyst. Thus benzyl alc. (3 g.) with the anhydride (0.3 g.) distd. at 135-60° gave styrene. The esterification of tertiary alcs. is being investigated.

Chas. Blanc

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



CA

10

α-Vinylnaphthalene and some of its derivatives. Yu. S. Zal'kind and S. A. Zonis. *J. Gen. Chem.* (U. S. S. R.) 6, 988-98(1936).—The polymerization ability of high-mol. unsatd. compds. in relation to their structure and the properties of the resulting polymers was studied in the case of α-vinylnaphthalene (I) and its derivs. substituted in the side chain. I, $RCH{:}CH_2$ (II), $RCMe{:}CH_2$ (III), $RCMe{:}CHMe$ (IV), and $RCEt{:}CHMe$ (V) (R = $C_{10}H_7$), were prepd. by the Grignard reaction by interaction of CuH_7MgBr and the corresponding alcs. with subsequent dehydration of the resulting alcs. with $KHSO_4$ (cf. Shorygin and Shorygin, *C. A.* 29, 6883⁹). The alcs. were identified as the acid esters of $C_6Cl_4(CO_2H)_2$. The polymerization was effected without catalysts and in the presence of B_2O_3H and floridin at 20°, 40°, 60° and at higher temps. The polymerization rate was detd. either by vacuum distn. of the monomer and weighing the polymer residue, or by measuring the relative viscosity in the Ostwald viscometer. I under all conditions gave only a polymer and in the unit. proportional to the elapsed time. The viscosity of polymerization product increased at a greater rate than the percentage of polymer in the reaction mixt. Thus, viscosities of 9.81 and 36.28 with 10.28% and 30.63% polymer resulted after 11 and 22 days, resp. The viscosity of a polymer at an equal concn. obtained at 20° is greater than that of the product obtained at 40°. The resistance to heat is 150-60° for I polymerized at 20°, and 110-20° for the product obtained at 20°. The polymer of I obtained in the presence of B_2O_3H catalyst showed poor insulating properties and considerable dielec. losses. The derivs. of I showed poor polymerizing ability even at elevated temps. (boiling water bath). V failed to polymerize under all conditions. III and IV showed no increase in the viscosities after 44 days of polymerization in the presence of 0.5% B_2O_3H, while II gave 8.2% polymer. III and IV doubled the viscosities in the presence of floridin after 100 days at 20°. The substituted I gave chiefly dimers and no polymers as in the case of I. The asym. derivs. of I are more easily polymerized than the asym. ones. I, b_6 105-6°, d_4^{20} 1.0774, n_D^{20} 1.6385, M. R. 58 (60.41 calcd.), exaltation 1.60. II, b_6 112-13°, d_4^{20} 1.0429, d_4^{20} 1.0283, n_D^{20} 1.6333, exaltation 2.51, M. R. 55.03 (57.54 calcd.). III, b_6 112-13°, d_4^{20} 1.027, n_D^{20} 1.6142. IV, b_6 113.5-15°, d_4^{20} 1.0533, n_D^{20} 1.6137, exaltation 0.4, M. R. 60.05 (59.45 calcd.). V, b_6 119-20°, d_4^{20} 1.034, n_D^{20} 1.597, exaltation 0.35, M. R. 64.02 (64.27 calcd.). More than 30 references. Chas. Blanc

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

ZONIS, S.

"On the Polymerization of Derivatives of Vinylnaphthalene," Zhur. Obshch. Khim., 9, No. 2, 1939. Laboratory of Organic Chemistry, Leningrad Order of the Red Banner Chemico-Technological Institute. Received 27 May 1938.

Report U-1517, 22 Oct 1951

PROCESSES AND PROPERTIES INDEX

BC

Action of sulphuric acid on tert.-dienols. [illegible] ([illegible] Gen. Chem. Russ., 1939, 9, 2191—2195).— $OH·CMe_2·C:C·CMe_2·OH$ [illegible] is hydrogenated (Pd catalyst) to [illegible], b.p. 103—104°/12 mm. [illegible] and [illegible] in H_2O gives [illegible], b.p. 65—66°/5 mm., hydrogenated as above to [illegible]-diol, b.p. 78—80°/12 mm. The dienols with H_2SO_4 (6—20 hr. at 100°) yield 1:1-dimethyl-, b.p. 108—111°, and 1-methyl-1-propyl-$\Delta^{2:4}$-cyclopentadiene, b.p. 78—82°/55 mm.

R. T.

Lab. Org. Chem., Leningrad Chemico-Tech. Inst.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

ZONIS, S. A.

S. A. Zonis and A. G. Pesina - "Manganese tetraacetate as an agent for oxidation of organic compounds. I. The oxidation of a-glycols." (p. 1180)

SO: Journal of General Chemistry, (Zhurnal Obshchei Khimii), 1940, Vol. 20, No. 7.

CA

10

Manganese tetraacetate as an oxidizer of organic compounds. I. The reaction of oxidation of α-glycols S. A. Zonis and A. G. Pesina (Leningrad Sanit.-Hyg. Inst.) *Zhur. Obshchel Khim.* (J. Gen. Chem.) **20**, 1180-6 (1950).—The rate of oxidation of α-glycols by $Mn(OAc)_3$ depends on the temp., solvent, and the structure of the substrate. In inert solvents the reaction is slower than in AcOH. The reaction mechanism postulated proceeds via the formation of Mn acetate alcoholates which cleave, yielding hydroxyls of the substrate, the radicals then cleaving into 2 moles of the ketone. The glycols studied included: *tetraphenylethylene glycol*, m. 173-4°, *sym-dimethyldiphenylethylene glycol*, m. 110-18°, (*trimethylphenyl*)*ethylene glycol*, m. 84-6°, *tetramethylethylene glycol*, m. 41-5°, *sym-diphenylethylene glycol*, m. 131-6°, *cis-1,2-cyclohexanediol*, m. 95.5-7.0°, and the *trans-isomer*, m. 102-4°. These (0.0001 mole) and the calcd. amt. of $Mn(OAc)_3$ were warmed in a CO_2 atm. in 30 ml. solvent and aliquots were taken at 0.5-1.0 hr. intervals; the exptl. temp. ranged from 20 to 100°. The results are given in tabular form. Replacement of Me by Ph radicals greatly accelerated the oxidation. No significant difference was found between oxidation rates of the *cis*- and *trans*-1,2-cyclohexanediols, either in AcOH or in $(CHCl_2)_2$. PhCl and pyridine were the other solvents used in the study. The products obtained were: Ph_2CO from benzopinacol, Me_2CO from pinacol, AcPh from $(CMePhOH)_2$, AcPh and Me_2CO from $HOCMe_2CMePhOH$, BzH from hydrobenzoin, and adipaldehyde from cyclohexanediol. G. M. K.

CA

10

Manganese tetraacetate as an oxidizing agent for organic compounds. I. Oxidation of α-glycols. S. A. Zonis and A. G. Pesina. *J. Gen. Chem. U.S.S.R.* **20**, 1227-30(1950) (Engl. translation). See *C.A.* **45**, 1558*e*. R. M. S.

ZONIS, S. A.

B.A

AT-1

Oxidation by manganese triacetate. II. Oxidation of α-glycols and α-keto-alcohols. S. A. Zonis and Y. I. Korniluva (*J. gen. Chem. USSR*, 1950, **20**, 1252—1261 (U.S. transl., 1301—1310; cf. preceding abstract).—The mechanism of oxidation of glycols by $Pb(OAc)_4$ suggested by Criegee *et al.* (*Ann.*, 1933, **507**, 159) is not applicable to $Mn(OAc)_3$ and the following scheme is advanced: $OH\cdot CR'R''\cdot CR'R''\cdot OH + Mn(OAc)_3 \rightarrow$ $OH\cdot CR'R''\cdot CR'R''\cdot OMn(OAc)_2 + Mn(OAc)_3 \rightleftharpoons$ $[CR'R''\cdot OMn(OAc)_2]_2 \rightarrow (R'R''CO\cdot)_2 \rightarrow 2CR'R''O$. The velocity of oxidation is influenced by the structure of the compound undergoing oxidation, by the solvent, and by the temp. In polar solvents (glacial and 80% AcOH) the rates of oxidation of dihydric alcohols are arranged in the following sequence: benzpinacone, $(CPhMe\cdot OH)_2$, $OH\cdot CMe_2\cdot CPhMe\cdot OH$, $OH\cdot CMe_2\cdot CMe_2\cdot OH$, α-dihydroxycyclopentyl, and α-hydroxycyclohexylcarbinol. The rate of oxidation is influenced by the concn. of the solvent; in 80% AcOH all the glycols and α-keto-alcohols investigated are oxidised more slowly than in glacial AcOH. Under the same conditions, di*tert.* glycols are oxidised more rapidly than di*sec.* The character of the solvent influences the oxidising potential of $Mn(OAc)_3$. In particular, in the neutral solvents, $(CHCl_2)_2$ and $CCl_2{:}CHCl$, glycols are oxidised more slowly than in AcOH.

Experiments are carried out in a 3-necked flask fitted with a stirrer and a reflux condenser, in CO_2. The weighed quantity of $Mn(OAc)_3$ (0·001—0·002 mol.) is dissolved in 40—50 ml. of the desired solvent at the requisite temp. and the activity is measured. The glycol or keto-alcohol (0·005—0·0025 mol.) is added and the activity of aliquots is measured after definite time intervals. In all cases at the end of the experiment part of the solvent is removed and H_2O is added to the residue, which is filtered. The filtrate is made weakly alkaline with Na_2CO_3 or 10% alkali and extracted with Et_2O. Solvent is removed from the dried extracts and the residue is treated with NH_2OH,HCl. Thus are obtained benzophenone oxime, m.p. 134—136°, and acetophenone oxime, m.p. 57—58°. Pinacone and $OH\cdot CPhMe\cdot CMe_2\cdot OH$ furnish $COMe_2$, determined qualitatively by Na nitroprusside. Hydrobenzoin gives PhCHO, detected qualitatively by Nessler's reagent. The isolation of the oxidation products of the α-keto-alcohols is effected similarly after the Et_2O has been removed and the solid residue crystallised from EtOH; benzil and anisil are thus obtained.

H. Wren.

ĆA

AL-1

Oxidation by manganese triacetate. III. Action of manganic triacetate on γ-acetylenic glycols. [illegible] (J. gen. Chem. U.S.S.R., 1950, 20, 1262—1272 [U.S. transl., 1311—1321]; cf. preceding abstracts).—Sec. γ-acetylenic glycols (diphenylbutynediol) and $Mn(OAc)_3$ give γ-diketones of the acetylenic series. $Mn(OAc)_3$ acts as an acetylating agent at the triple linking only with *tert.* γ-acetylenic glycols of the aromatic series, in this way giving Ac deriv. of the dihydrofuran series. γ-Acetylenic glycols of the alkyl series are oxidised with rupture of the C skeleton. The stereoisomeric structure of the glycols, in addition to the character of the radicals, influences the velocity of the reaction. Glycols which are investigated are arranged in the following order with regard to rate of reaction: tetra-*p*-tolyl-, *s*-diphenyl-*p*-ditolyl-, tetraphenyl-, and tetramethyl-butynediol.

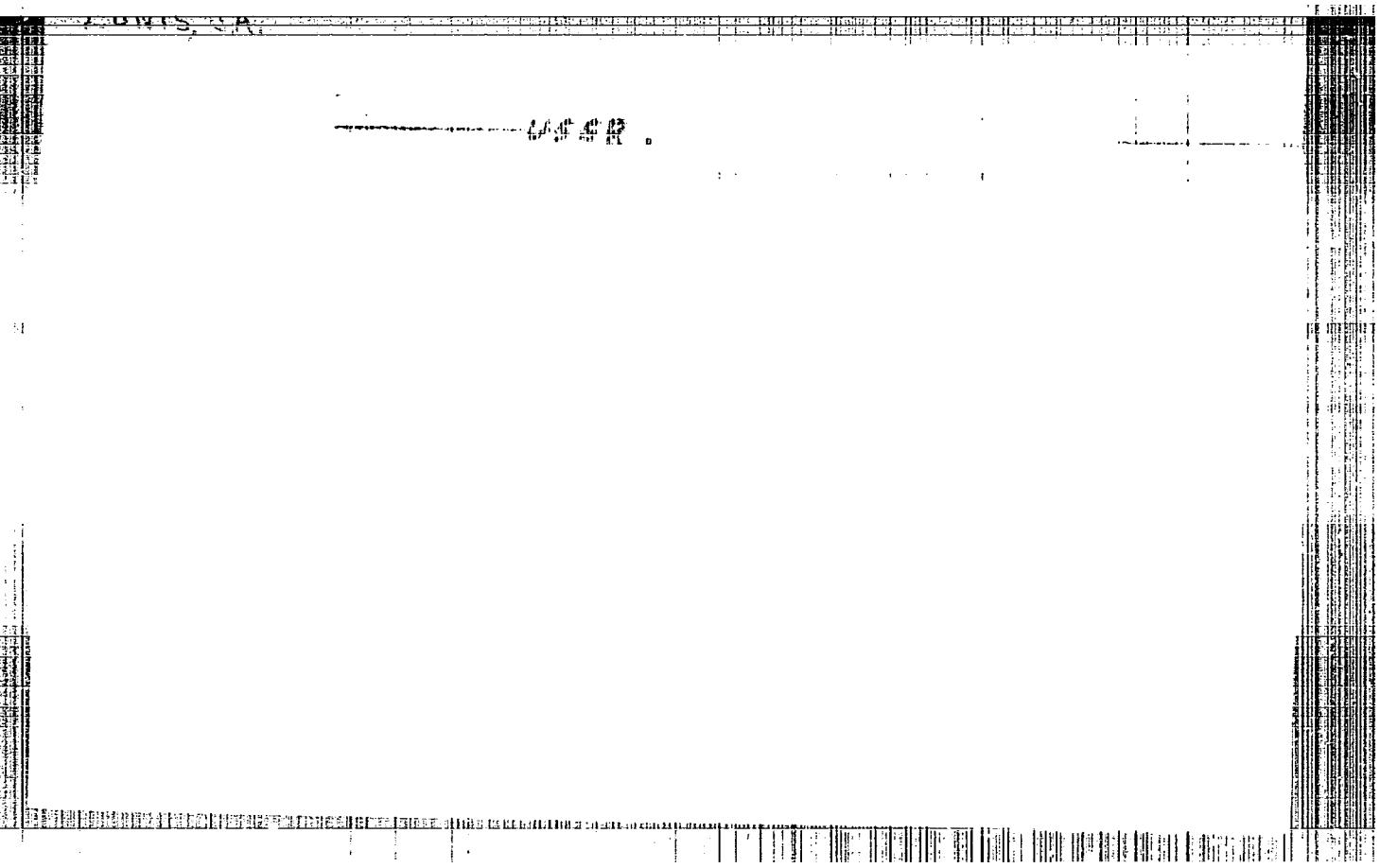
1 : 4-Diphenylbut-2-yne-1 : 4-diol, $Mn(OAc)_3$, and AcOH at 100° furnish $COPh_2$, m.p. 48—49°, and the *diacetate*, $C_{22}H_{18}O_6$, m.p. 189—190°, of an unidentified *substance*, m.p. 161—163°. Di-*p*-tolyl ketone cannot be made by condensing PhMe with CH_2O in presence of H_2SO_4 but CH_2Ph_2 is prepared by dropwise addition of conc. H_2SO_4 and then PhMe to CH_2O diluted with EtOH at 40—50°. This is mixed with H_2O containing a little $Pb(OAc)_2$, heated to the b.p., and oxidised to $COPh_2$ by dropwise addition of HNO_3 (d 1·4). Adding the ketone to MgBr·C:C·MgBr affords 1 : 1 : 4 : 4-*tetra-p-tolylbut-2-yne-1 : 4-diol* (I) (70%), m.p. 136·5—137·5°, which gives a cherry-red colour with conc. H_2SO_4, does not react with Ag_2O-NH_3, or with Cu_2Cl_2, but gives a positive test for a triple linking with Na in $C_5H_{11}OH$. It is completely oxidised by $Mn(OAc)_3$ in AcOH within 1 hr. to 3 : 4-*diacetyl-2 : 2 : 5 : 5-tetra-p-tolyl-3 : 4-dihydrofuran*, $C_{34}H_{32}O_3$, m.p. 85—87°. Tests for the presence of triple linkings, CO groups, and active H are negative, and solutions of $KMnO_4$ in $COMe_2$ and Br in AcOH are not decolourised. Reaction of *p*-COPh·C_6H_4Me, m.p. 54·5—55·5°, with MgBr·C:C·MgBr gives 1 : 4-diphenyl-1 : 4-di-*p*-tolylbut-2-yne-1 : 4-diol, m.p. 144—146°, with an *isomer* (I), $C_{30}H_{26}O_2$, m.p. 132—134° (main products). I is oxidised by $Mn(OAc)_3$ in AcOH at 100° to 3 : 4-*diacetyl-2 : 5-diphenyl-2 : 5-di-p-tolyldihydrofuran*, m.p. 80—82° [*semicarbazone*, $C_{31}H_{21}O_3N_6$, m.p. 251—252° (decomp.), or 245—246° (decomp.) in a sealed capillary]. COPhMe and MgBr·C:C·MgBr afford two 2 : 5-diphenylhex-3-yne-2 : 5-diols, m.p. 123—125° and 163—164·5°, respectively, the former of which is the more readily oxidised. 2 : 5-Dimethylhex-3-yne-2 : 5-diol is oxidised to $COMe_2$ and [illegible]

eA

10

Oxidation by manganese triacetate. II. Study of the oxidation of α-glycols and α-keto alcohols. S. A. Zonis and Yu. I. Kuznetsova. *J. Gen. Chem. U.S.S.R.* 20, 1361–70 (1950) (Engl. translation). IV. The action of manganese triacetate on γ-acetylenic glycols. S. A. Zonis. *Ibid.* 1371–2 (Engl. translation). See C.A. 45, 10190d.

R. M. S.



ZONIS, S.

USSR/Chemistry

Card 1/1

Author : Zonis, S.

Title : Oxidation of tertiary [illegible] manganese [illegible]

Periodical : Zhur. Ob. Khim. 24, Ed. [illegible], 814 - 816, May 1954

Abstract : Experiments on the oxidation of tertiary [illegible] alcohols with [illegible]

[illegible]

man since 1904.

Institution : ....

Submitted : December 18, 1953

ZONIS, Semen Aleksandrovich; MAZUROV, Sergey Mikhaylovich; KHAVIN, Z.Ya., redaktor; ERLIKH, Ye.Ya., tekhnicheskiy redaktor

[Lecture experiments and demonstration materials in organic chemistry] Lektsionnye opyty i demonstratsionnye materialy po organicheskoi khimii. Pod red. B.N.Dolgova. Leningrad, Gos.nauchno-tekhn. izd-vo khim. lit-ry, 1956. 508 p. (MLRA 9:8)
(Chemistry, Organic--Experiments)

LEBEDEVA, V. M.; ZONIS, S. A.

Manganese tetraacetoacetate as oxidizer of organic compounds.
Izv.AN Kir.SSSR,Ser.est.i tekh.nauk 4 no. 6:83-92 '62.
(MIRA 17:5)

ZONIS, S.A.; LEBEDEVA, V.M.

Manganese tetraacetate as an oxidiser of organic compounds; kinetics of the oxidation reaction of secondary α-keto alcohols. Izv. AN Kir. SSR. Ser. est. i tekh. nauk 3 no.2:51-56 '61. (MIRA 16:7)

(Ketols) (Manganese acetate) (Oxidation)

ZONIS, Semen Aleksandrovich; MAZUROV, Sergey Mikhaylovich; BEREZIN, B.I., red.; ZAKHARIKOVA, Ye.I., red.izd-va; GARINA, T.D., tekhn. red.

[Laboratory and lecture experiments and demonstration materials in organic chemistry] Laboratorno-lektsionnye opyty i demonstratsionnye materialy po organicheskoi khimii. Izd.2., ispr. i dop. Moskva, Gos. izd-vo "Vysshaia shkola," 1961. 720 p. (MIRA 15:3)

(Chemistry, Organic--Laboratory manuals)

PEREKALIN, Vsevolod Vasil'yevich; Prinimali uchastiye: SOPOVA, A.V.; LERNER, O.M.; ZONIS, E.S.; ZOBACHEVA, M.M.; KVITKO, S.M.; BAGNOV, Yu.V.; KAPLIN, S.V.; POLYANSKAYA, A.S.; PADVA, G.D.; ZONIS, S.A., red.; FOMICHNA, T.A., tekhn. red.

[Unsaturated nitro compounds] Nepredel'nye nitrosoedineniia. Leningrad, Gos. nauchno-tekhn. izd-vo khim. lit-ry, 1961. 335 p. (MIRA 14:7)

(Nitro compounds)

ZONIS, S.A.; LEBEDEVA, V.M.

Kinetics of the oxidation of alpha-keto alcochols by manganese triacetate. Izv. AN Kir. SSR. Ser. est. i tekh. nauk 2 no.5:95-97 '60. (MIRA 13:9)
(Alcohols) (Manganese acetate) (Oxidation)

GARMONOV, I.V., otv.red.; KOROTKEVICH, B.S., otv.red.; KOHIS, S.A., red.; SHUR, Ye.I., red.; FOMKINA, T.A., tekhn.red.

[Synthesis of monomers for the production of synthetic rubber] Sintez monomerov dlia proizvodstva sinteticheskogo kauchuka. Leningrad, Gos.nauchno-tekhn.izd-vo khim.lit-ry, 1960. 250 p. (MIRA 13:12)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut sinteticheskogo kauchuka.

(Rubber, Synthetic)

ZONIS, S.A.; LEBEDEVA, V.M.

Kinetics of the oxidation of alpha-glycols by manganese triacetate. Izv. AN Kir. SSR. Ser. est. i tekh. nauk 2 no.5:85-92 '60. (MIRA 13:9)
(Glycols) (Manganese acetate) (Oxidation)

TSYSKOVSKIY, Viktor Karlovich; ZONIS, S.A., red.; FOMKINA, T.A., tekhn.red.

[Synthesis of aliphatic acids and alcohols by the oxidation of liquid paraffins] Sintez zhirnykh kislot i spirtov okisleniem zhidkikh parafinov. Leningrad, Gos.nauchno-tekhn.izd-vo khim.lit-ry, 1960. 143 p. (MIRA 13:12)
(Acids, Fatty) (Alcohols) (Paraffins)

Zonis, S.A.

BOGDANOV, M.I.; KOLOBIKHIN, V.A.; ISAKOVA, N.A.; GARMONOV, I.V., red.; ZONIS, S.A., red.; KLIMINA, Ye.V., red.; ERLIKH, Ye.Ya., tekhn.red.

[Analysis of the products obtained in the industrial preparation of bivinyl from butene] Analiz produktov proizvodstva divinila iz butana. Pod red. I.V.Garmonova. Leningrad, Gos.nauchno-tekhn.izd-vo khim.lit-ry, 1959. 115 p. (MIRA 13:2)
(Butadiene) (Butane)

DOLGOV, Boris Nikolayevich; ZONIS, S.A., red.; LOBINA, N.K., red.; ERLIKH, Ye.Ya., tekhn.red.

[Catalysis in organic chemistry] Kataliz v organicheskoi khimii. Izd.2., perer. i dop. Leningrad, Gos.nauchno-tekhn. izd-vo khim.lit-ry, 1959. 807 p. (MIRA 12:7)
(Catalysis) (Chemistry, Organic)

ZONJI, Dordo, inz.

Certain interrelating phenomena in the cheese salting with brine. Kem ind 12 no.9:670-672 S '63.

1. Gradsko mlekarstvo, Beograd.

ZONJIC, I.

"Production of Plants Immune to Disease and Harmful Insects", p. 12,
(POLJOPRIVREDA, Vol. 2, No. 7/8, July/Aug. 1954, Belgrade, Yugoslavia)

SO: Monthly List of East European Accessions (EEAI), LC, Vol. 4, No. 3,
March 1955, Uncl.

KCHJIC, I.

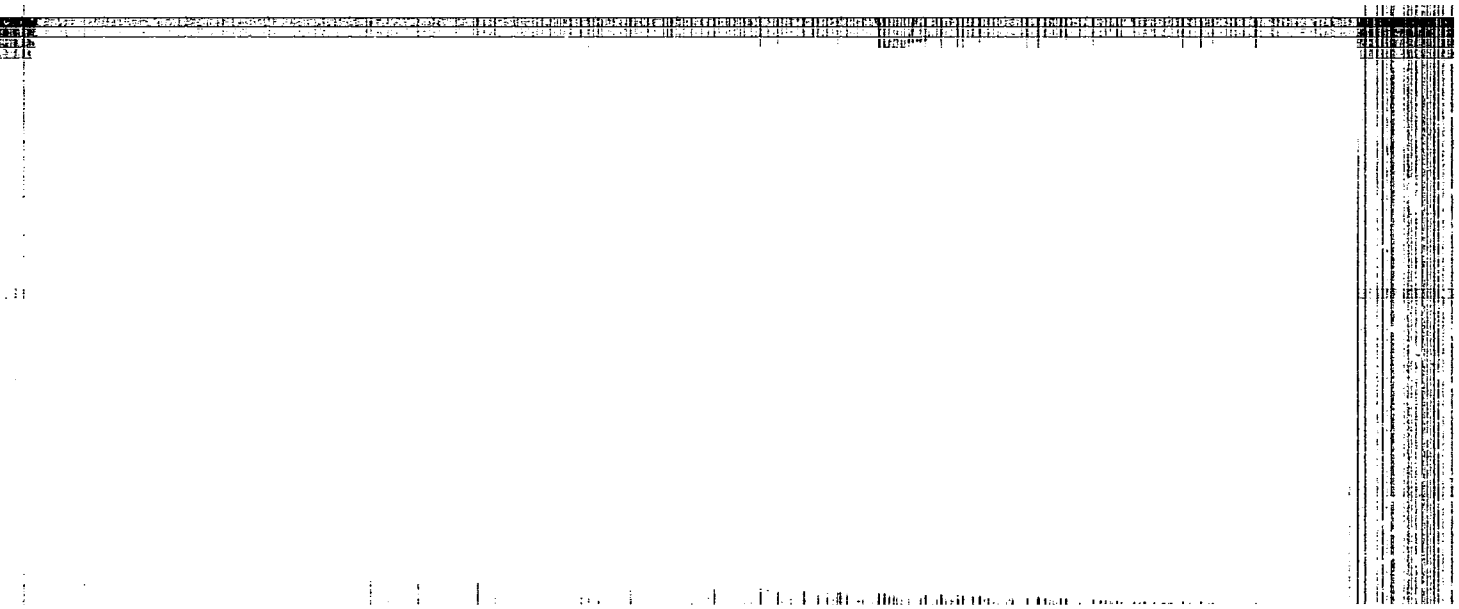
"Terraced Vineyars; An Opinion of the Vinegrowing Institute in Mariber", P. 10, (POLJOPRIVREDA, Vol. 2, No. 7/8, July/Aug. 1954, Belgrade, Yugoslavia)

SO: Monthly List of East European Accessions (EEAL), LC, Vol. 4, No. 3, March 1955, Uncl.

ZIVKOVIC, B.; ZONJIC, S.; CURIN, H.

Hemagglutination reaction in epidemic hepatitis. Higijena 14 no.1: 11-20 '62.

(HEPATITIS INFECTIOUS diag) (HEMAGGLUTINATION)



APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R002065420009-3"

Doctor of Geography

On: Expedition for the survey of location for future port; Divinc Survey.

Soviet Source: P: Vokruc Sveta; March-April 1946, Moscow.

Abstracted in USAF "Treasure Island" Report No. 44233, on file in Library of Congress, Air Information Division.

ZONN and SOKOLOV

Armatures

Device for reconditioning winding wire. Torf. prom, 29, No. 3, 1952.

Monthly List of Russian Accessions, Library of Congress, May 1952, UNCLASSIFIED.

ZONN, fnu.; SOKOLOV, fnu.

Electric Wire

Device for reconditioning winding wire, Torf, prom, 29, no. 3, 1952.

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ZONN, G.K., inzhener.

Defective index. Izobr. v SSSR 1 no.6:33-34 D '56.
(Industrial statistics) (MLRA 10:4)

ZONN, I.S.

"A look at Canadian soils." Pochvovedenie no.10:114-117 O '61.
(MIRA 14:9)
(Canada--Soils)

ZONN, M.G.; CHERNENOV, A.M.; SHINIBEROV, P.Ya., otv. red.; GAL'CHINSKAYA, V.V., tekhn. red.

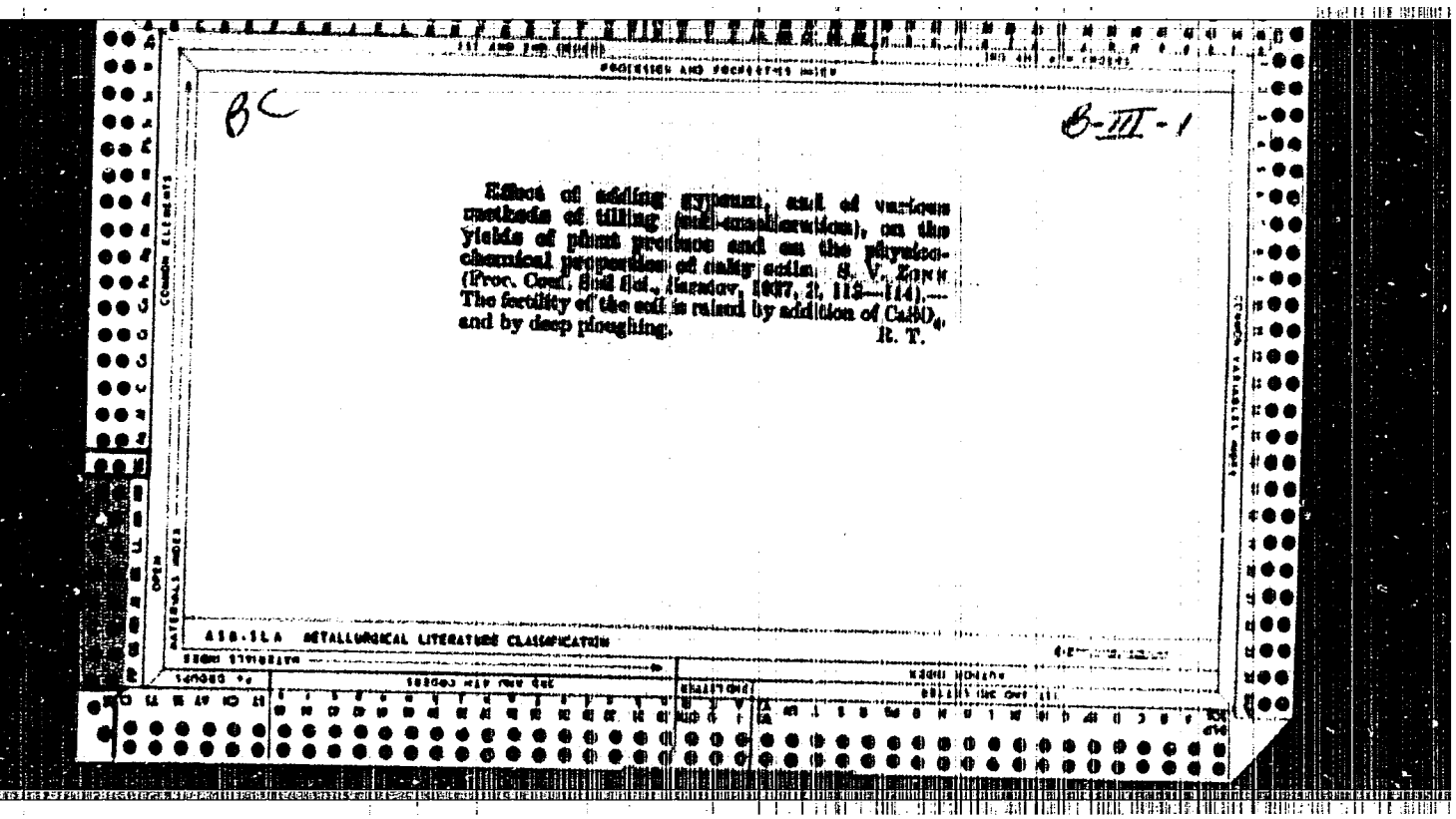
[Instructions for laboratory work in the field of overhead communication lines] Rukovodstvo k laboratornym rabotam po vozdushnym liniiam sviazi. Leningrad, Elektrotekhn. in-t sviazi. Part 1. [Testing the engineering properties of line wire and insulators and methods for splicing wires and fastening lines to poles] Ispytanie tekhnicheskikh svoistv lineinoi provoloki i izoliatorov, sposoby soedineniia kontsov provodov, ukreplenie provodov na oporakh. Pod red. P.IA.Shiniberova. 1959. 29 p. (MIRA 14:5)

(Electric lines--Overhead)

ZONN, N.L.; GALIMULLIN, G.M.

Increasing the efficiency of pumping stations. Transp. i khran. nefti i nefteprod. no.4:4-7 '64 (MIRA 17:7)

1. Chernikovskoye rayonnoye nefteprovodnoye upravleniye.

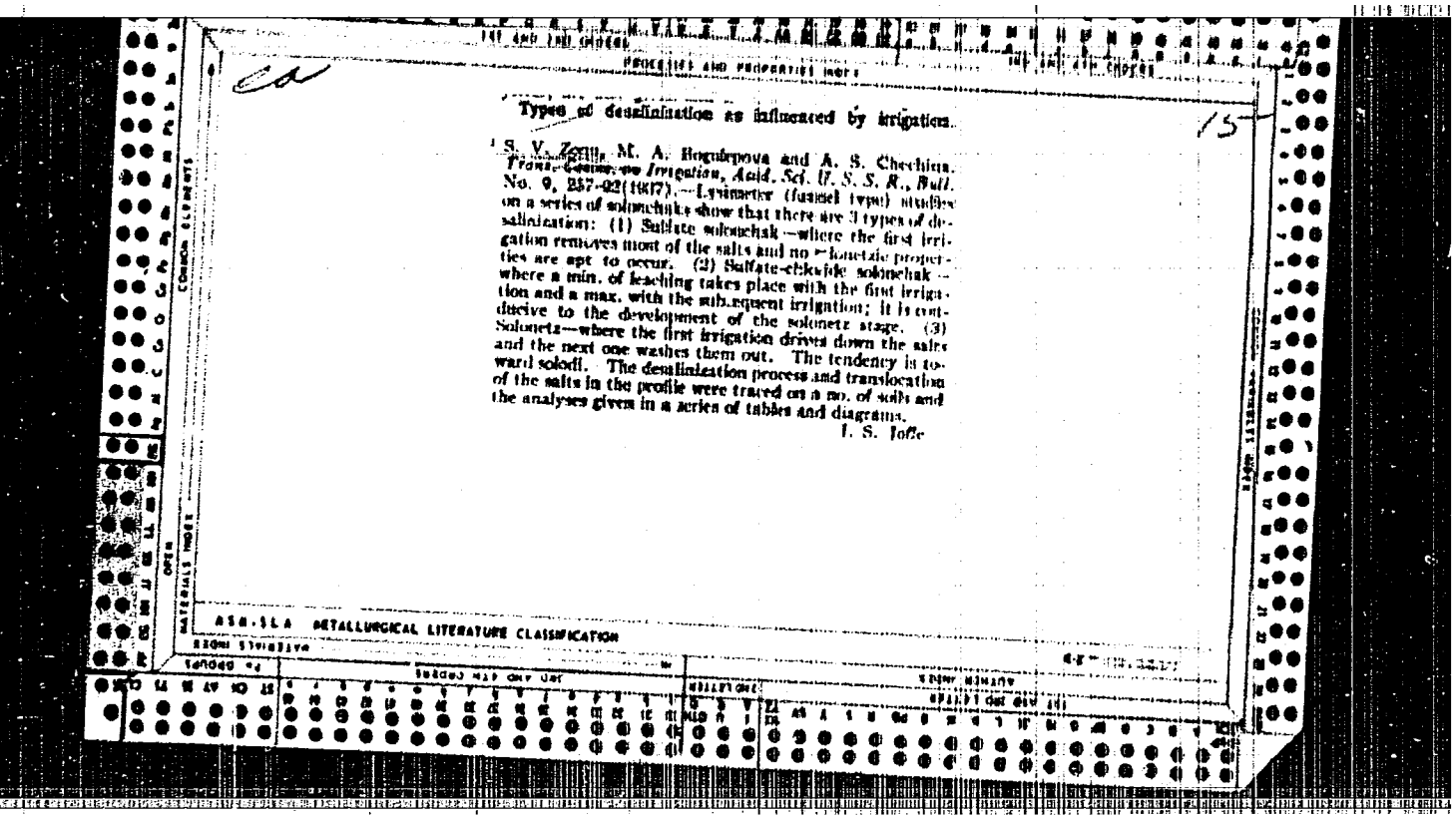


BC

B-III-1

Effect of adding gypsum, soil of various methods of tilling (soil-amelioration), on the yields of plant produce and on the physico-chemical properties of clay soils. S. V. Zonn (Proc. Cent. Soil Sci., Izvestiya, 1937, 2, 113—114).— The fertility of the soil is raised by addition of $CaSO_4$, and by deep ploughing. R. T.

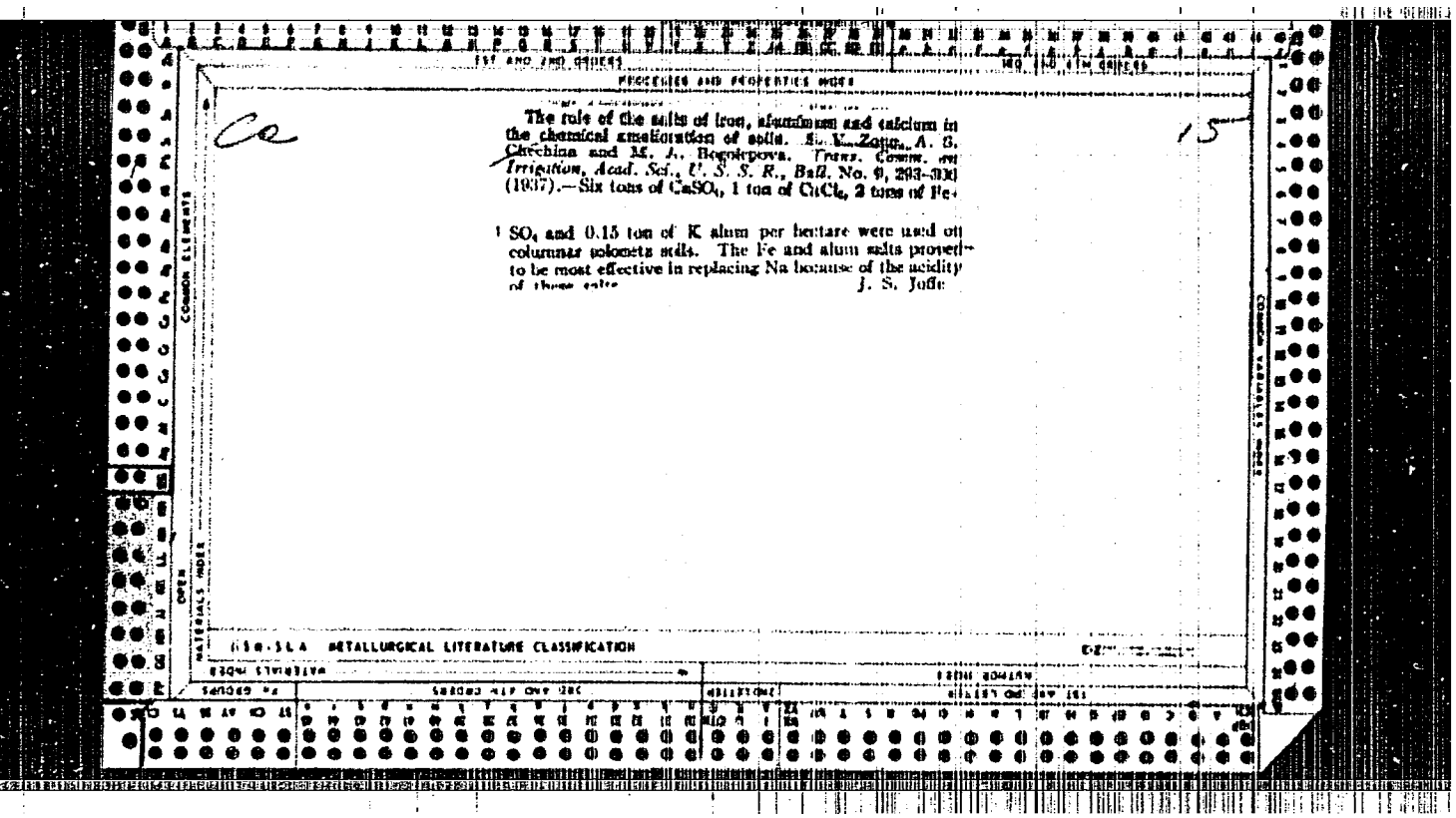
A10-11A METALLURGICAL LITERATURE CLASSIFICATION



Types of desalinization as influenced by irrigation.

S. V. Zonn, M. A. Bogatyrova and A. S. Chechina. *Trans. Conference on Irrigation, Acad. Sci. U. S. S. R., Bull.* No. 9, 257-92 (1947).—Lysimeter (funnel type) studies on a series of solonchaks show that there are 3 types of desalinization: (1) Sulfate solonchak—where the first irrigation removes most of the salts and no chloretic properties are apt to occur. (2) Sulfate-chloride solonchak—where a min. of leaching takes place with the first irrigation and a max. with the subsequent irrigation; it is conducive to the development of the solonetz stage. (3) Solonetz—where the first irrigation drives down the salts and the next one washes them out. The tendency is toward soloffi. The desalinization process and translocation of the salts in the profile were traced on a no. of soils and the analyses given in a series of tables and diagrams.

I. S. Joffe



Ca

15

The role of the salts of iron, aluminum and calcium in the chemical amelioration of soils. E. V. Zotta, A. S. Chechina and M. A. Bogolepova. *Trans. Comm. on Irrigation, Acad. Sci., U. S. S. R., Bull.* No. 9, 203–30 (1937).—Six tons of $CaSO_4$, 1 ton of $CaCl_2$, 2 tons of Fe

SO_4 and 0.15 ton of K alum per hectare were used on columnar solonetz soils. The Fe and alum salts proved to be most effective in replacing Na because of the acidity of these salts. J. S. Joffe

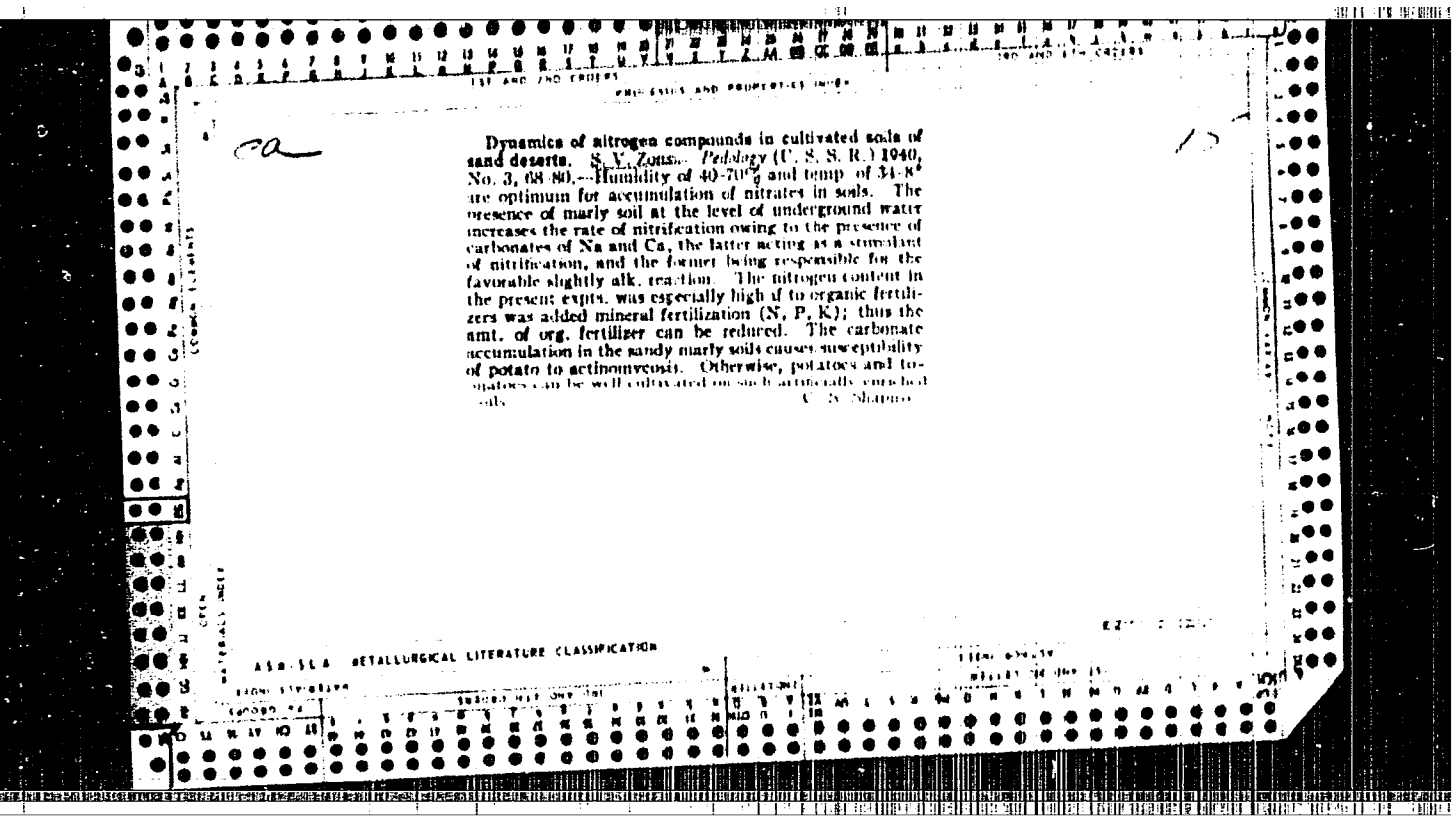
U.S.S.R. METALLURGICAL LITERATURE CLASSIFICATION

104

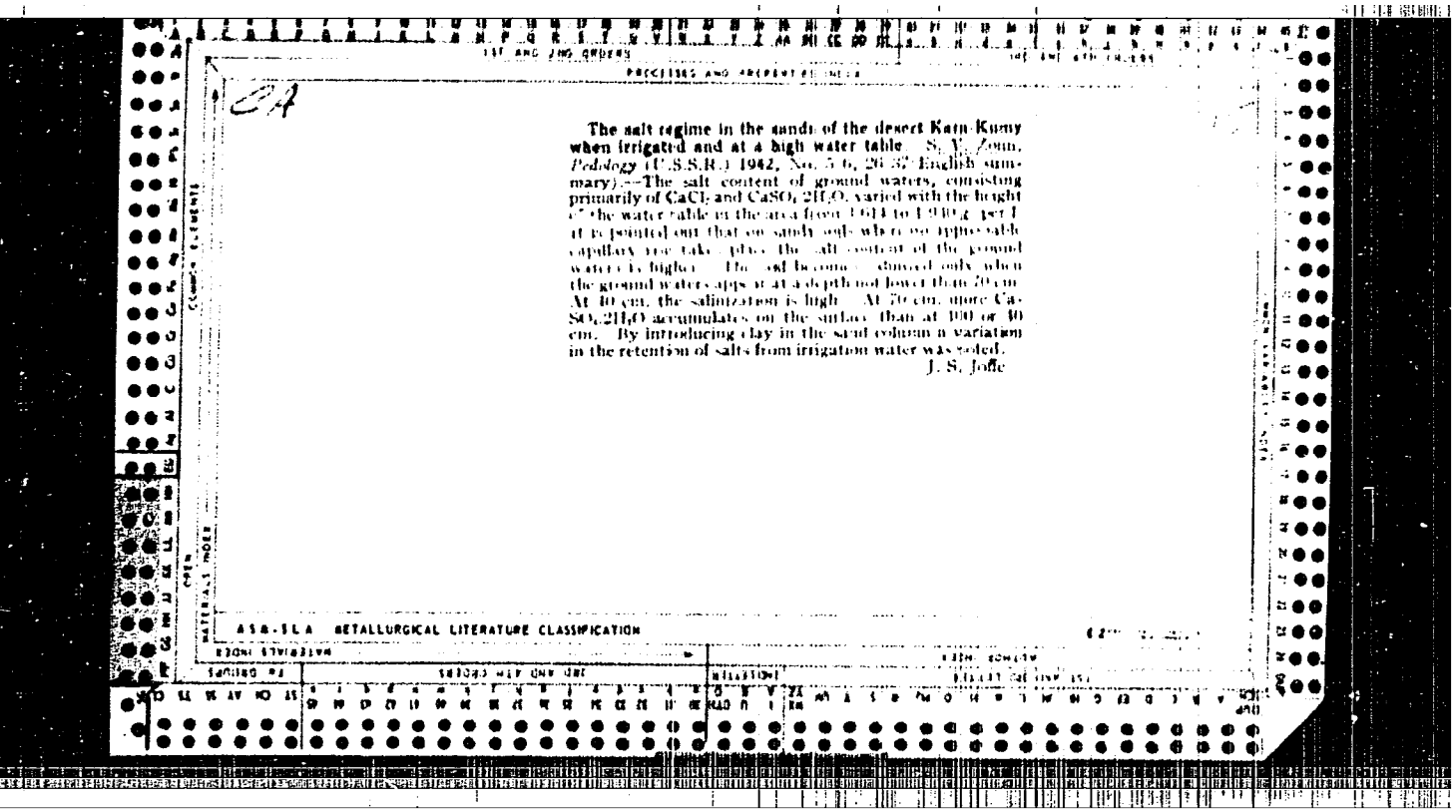
PROCESSES AND PROPERTIES INDEX

The effect of planting lucerne and adding gypsum on the cultivation of solonetz soils under irrigated farming conditions of the southeastern U. S. S. R. [illegible] and V. A. Shapkin. *Sovet. Agron.* 1939, No. 8, 58-64; *Khim. Referat. Zhur.* 1940, No. 4, 43; cf. C. A. 33, 8340.—Gypsum was added in amts. equal to 10, 15, 20 and 30 tons/hectare. Lucerne planted without gypsum did not affect the structure of solonetz soils. Added gypsum increased the yield of lucerne 2.0-2.5 times, and had a favorable effect on the penetration of lucerne roots into the soil and increased the accumulation of the root mass of lucerne 15 fold. Applications of 20-30 tons/hectare of gypsum had no more effect on the yield than did 10 tons. The amt. of exchange Na repd. in the 3rd year of adding gypsum was 52% of the initial content for 10 tons/hectare of gypsum and 62% for 20 tons/hectare. The method of fractional peptization according to Tyulin showed that under the influence of gypsum there takes place in the plowed layer a considerable increase of the active electronic congels and a decrease of the isoelec. congels. This produces a decrease of the loosely bound org. congels, and indicates that the soils must be enriched with the org. substance. W. R. Henn

METALLURGICAL LITERATURE CLASSIFICATION



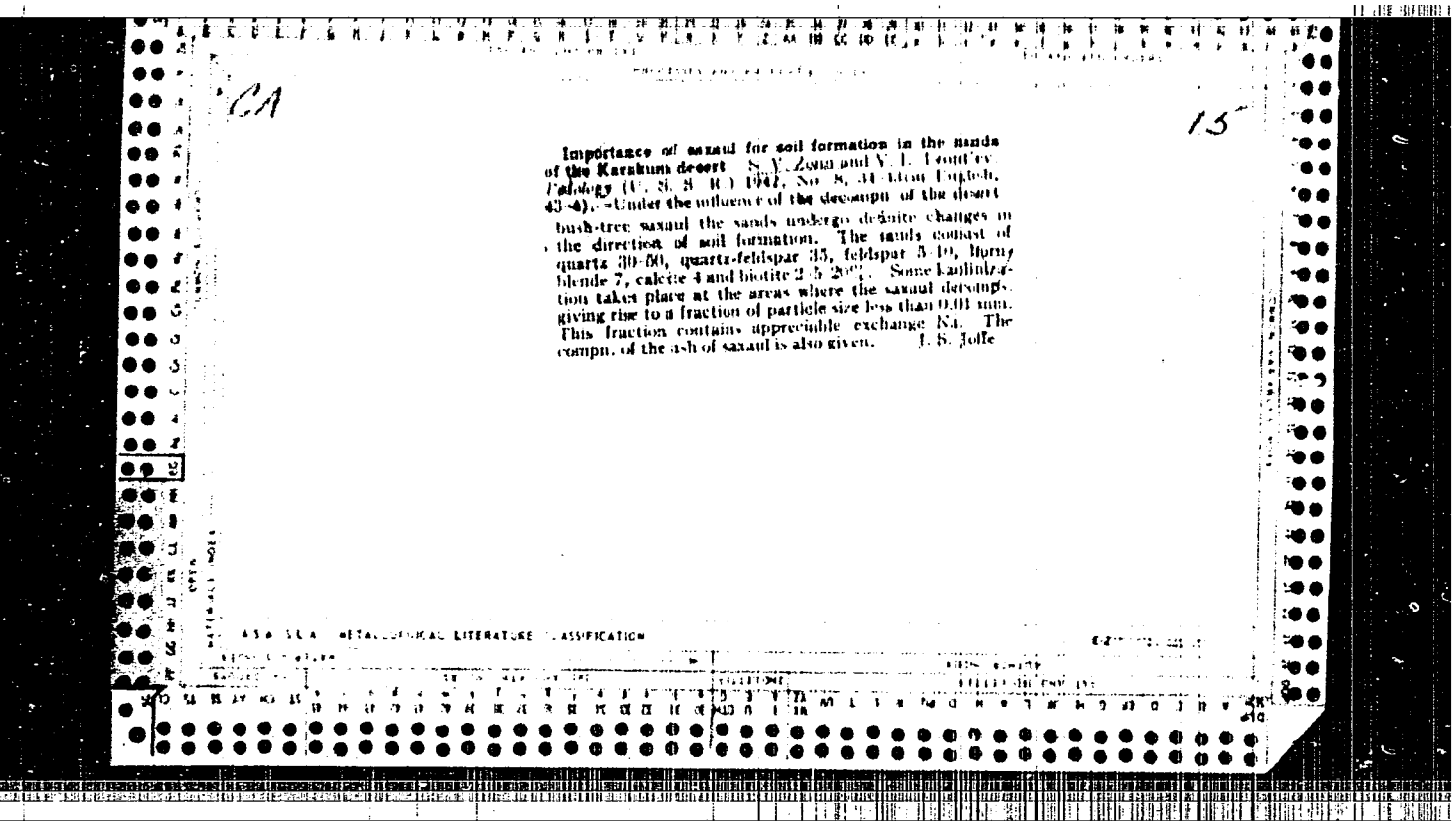
Dynamics of nitrogen compounds in cultivated soils of sand deserts. S. V. Zonn. *Pedology* (U. S. S. R.) 1940, No. 3, 68-80.—Humidity of 40-70% and temp of 34-8° are optimum for accumulation of nitrates in soils. The presence of marly soil at the level of underground water increases the rate of nitrification owing to the presence of carbonates of Na and Ca, the latter acting as a stimulant of nitrification, and the former being responsible for the favorable slightly alk. reaction. The nitrogen content in the present expts. was especially high if to organic fertilizers was added mineral fertilization (N, P, K); thus the amt. of org. fertilizer can be reduced. The carbonate accumulation in the sandy marly soils causes susceptibility of potato to actinomycosis. Otherwise, potatoes and tomatoes can be well cultivated on such artificially enriched soils. G. S. Sharpo



The salt regime in the sands of the desert Kara-Kumy when irrigated and at a high water table. S. V. Zonn. *Pedology* (U.S.S.R.) 1942, No. 5-6, 20-37. English summary.—The salt content of ground waters, consisting primarily of $CaCl_2$ and $CaSO_4 \cdot 2H_2O$, varied with the height of the water table in the area from 1.614 to 1.980 g. per l. It is pointed out that on sandy soils where no appreciable capillary rise takes place the salt content of the ground waters is higher. The salt becomes concentrated only when the ground water approaches at a depth not lower than 70 cm. At 40 cm. the salinization is high. At 70 cm. more $CaSO_4 \cdot 2H_2O$ accumulates on the surface than at 100 or 40 cm. By introducing clay in the sand column a variation in the retention of salts from irrigation water was noted.

J. S. Joffe

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

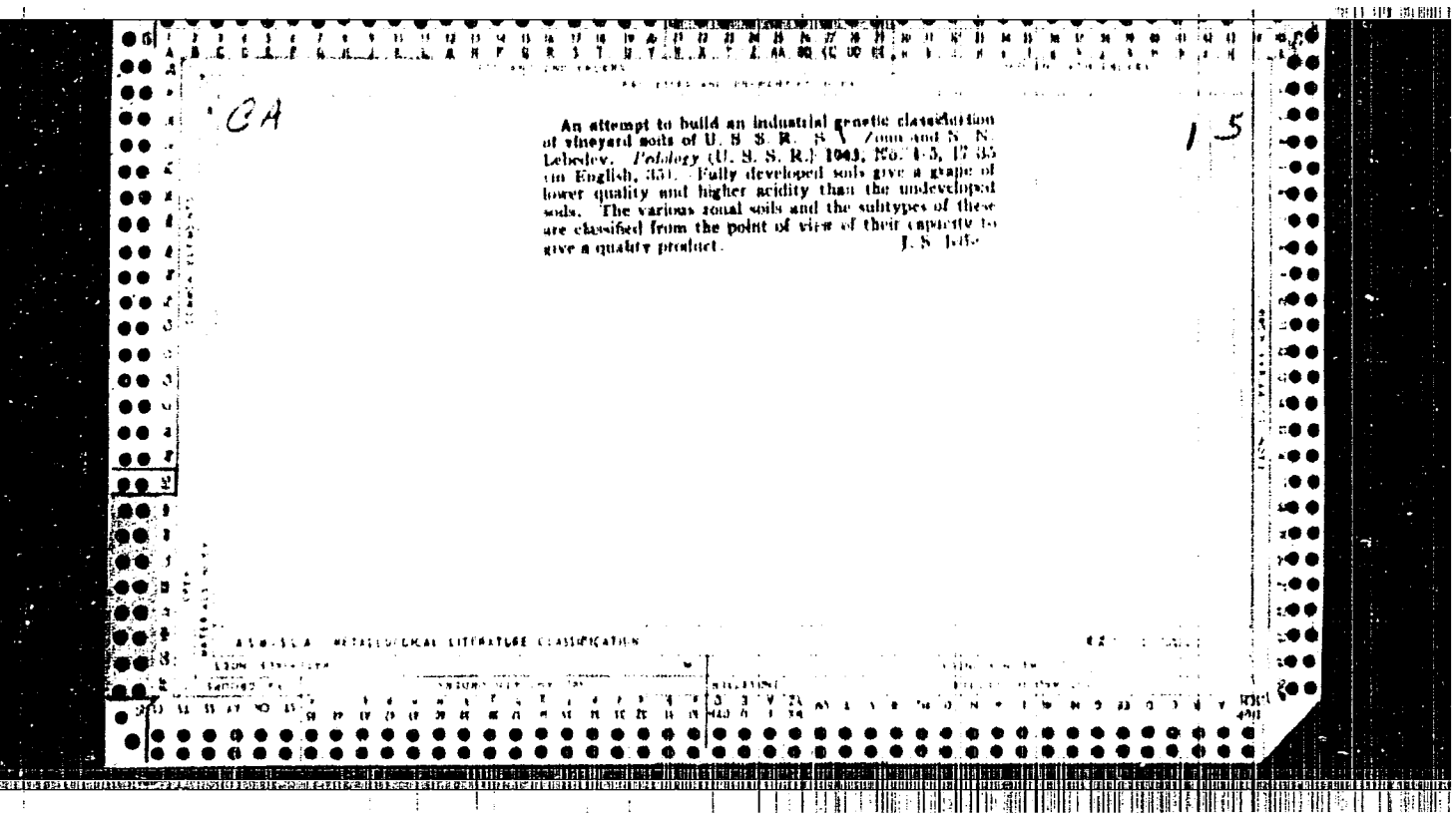


CA

15

Importance of saxaul for soil formation in the sands of the Karakum desert S. V. Zonn and V. I. Goutiev. *Pedology* (U. S. S. R.) 1942, No. 8, 34-41 (in English, 43-4).—Under the influence of the decompn. of the desert bush-tree saxaul the sands undergo definite changes in the direction of soil formation. The sands consist of quartz 30-50, quartz-feldspar 35, feldspar 5-10, horny blende 7, calcite 4 and biotite 2-5 [illegible]. Some kaolinization takes place at the areas where the saxaul decomps. giving rise to a fraction of particle size less than 0.01 mm. This fraction contains appreciable exchange Na. The compn. of the ash of saxaul is also given. J. S. Joffe

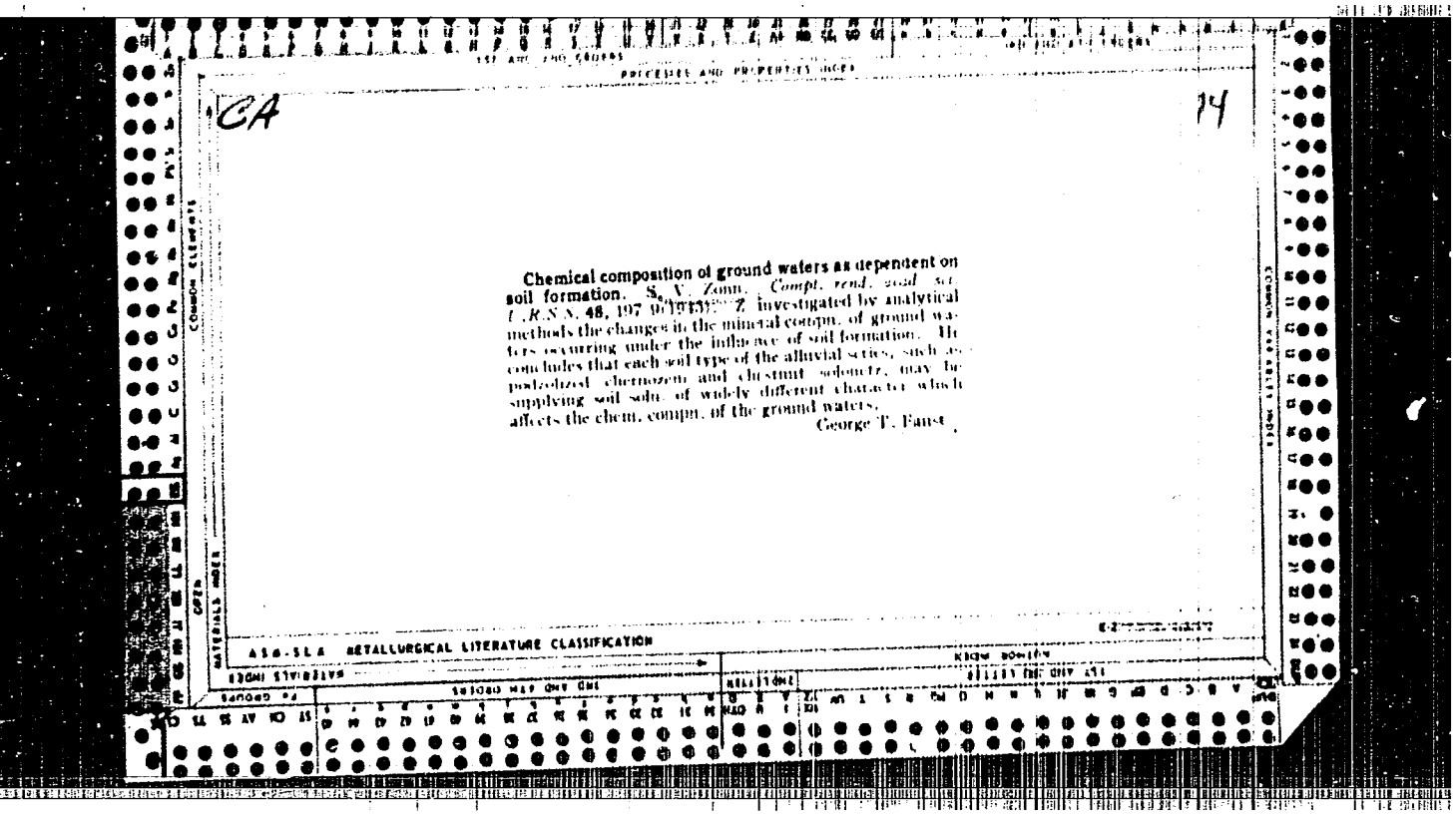
ASTIA ALEA METALLURGICAL LITERATURE CLASSIFICATION



CA

15

An attempt to build an industrial genetic classification of vineyard soils of U. S. S. R. S. V. Zonn and S. N. Lebedev. *Pedology* (U. S. S. R.) 1943, No. 1-5, 17-35 (in English, 35). Fully developed soils give a grape of lower quality and higher acidity than the undeveloped soils. The various zonal soils and the subtypes of these are classified from the point of view of their capacity to give a quality product. J. S. Joffe



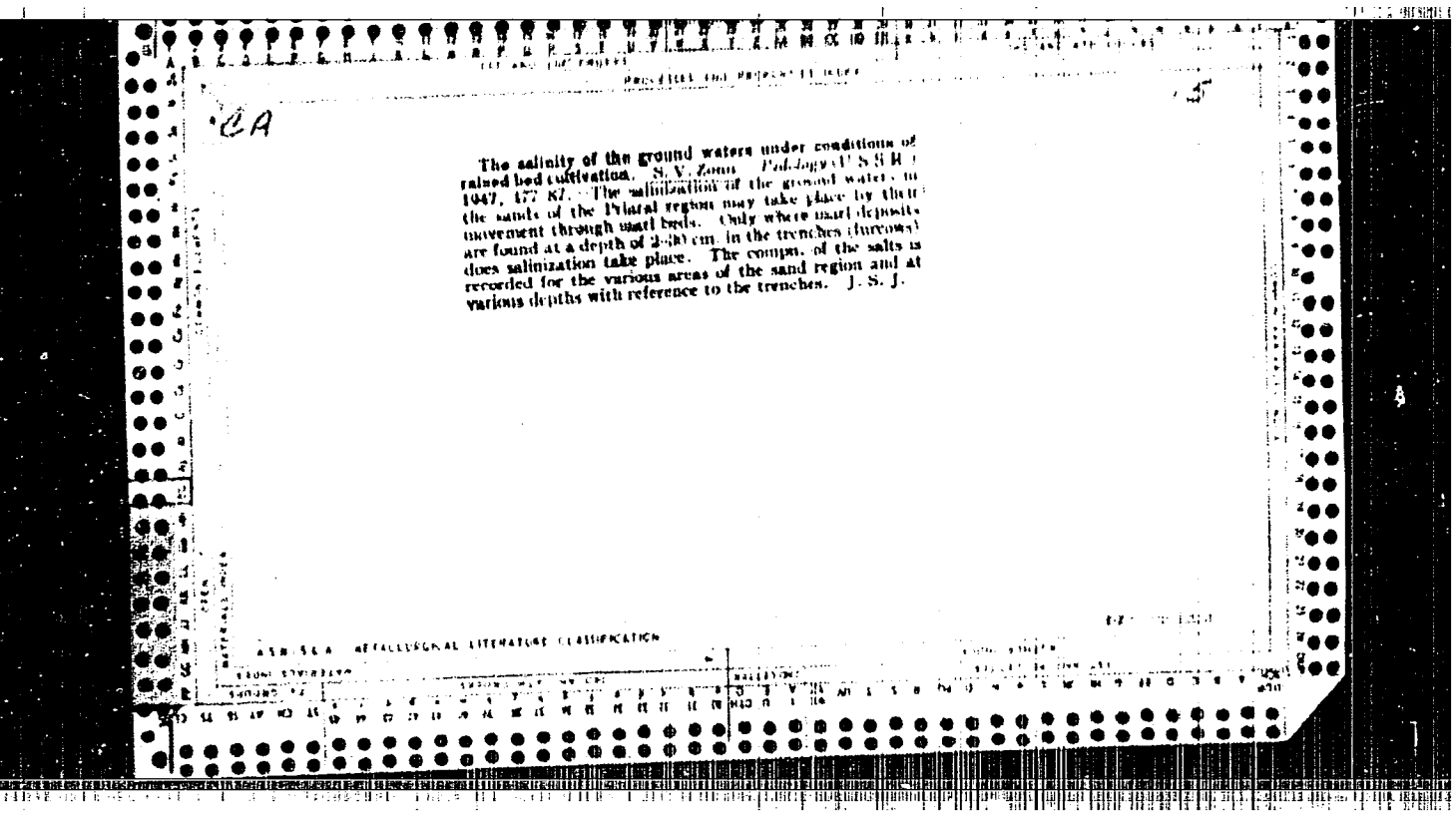
CA

14

Chemical composition of ground waters as dependent on soil formation. S. V. Zonn. *Compt. rend. acad. sci. U.R.S.S.* 48, 197 (1945).—Z investigated by analytical methods the changes in the mineral compn. of ground waters occurring under the influence of soil formation. He concludes that each soil type of the alluvial series, such as podzolized chernozem and chestnut solonetz, may be supplying soil solns. of widely different character which affects the chem. compn. of the ground waters.

George T. Faust

A56-S6A METALLURGICAL LITERATURE CLASSIFICATION



CA

The salinity of the ground waters under conditions of raised bed cultivation. S. V. Zonn. *Pedology* (U.S.S.R.) 1947, 477-87. The salinization of the ground waters in the sands of the Polesie region may take place by their movement through marl beds. Only where marl deposits are found at a depth of 2–3 m. in the trenches (furrows) does salinization take place. The compn. of the salts is recorded for the various areas of the sand region and at various depths with reference to the trenches. J. S. J.

CA

14

Chemical composition of ground waters in irrigated regions. S. V. Zonn. *Trudy Lab. Gidrogeol. Problem* im. F. P. Savarensky 1, 113-20(1948).—Chem. studies in 5 irrigated regions of the U.S.S.R. to det. the influence of season, soil, and evaporation on the compn. of ground waters. The compn. (in meq./l.), detd. for irrigation water, ground water in an irrigated plain, and ground water in a nonirrigated plain, was, resp., HCO_3^-, —, 3.10, and 12.50; Cl^-, 1.20, 82.30, and 452.30; SO_4^{--}, 1.40, 44.00, and 160.30; Ca^{++}, 2.80, 42.00, and 44.50; Mg^{++}, 3.30, 39.70, and 201.40; Na^+, —, 48.30, and 382.20; and Cl^-: SO_4^{--}, 0.8, 1.9, and 2.7. The dry residue in g/l. was 0.51, 0.19, and 40.72, resp.

V. H. Gottschalk