LAJKO, Pal, dr.; VITTAY, Pal, dr.

Results in intravenous pyelography with new universal compressorium. Magy. radiol. 8 no.4:238-241 Nov 56.

1. Az O.T.S.I. Korhaza es Rendelo Intezete (Igazgato: Kovari, Aladar, dr.) Rontgenlaborato-riumanak (foorvos: Lajko, Pal, dr.) kozlemenye.

(PYELOGRAPHY
intravenous, with universal compressorium, technic & results (Hun))

CSAKANY, Gyorgy, dr.; VITTAY, Pal, dr.; VOLNI, Gyorgy, dr.; BARSY, Gyula, dr.

Therapeutic radiation injury in the population of Budapest.
Orv.hetil. 101 no.46:1632-1634 13 N'60.

1. Orszagos Rontgen- es Sugorfizikai Intezet.
(RADIOTHERAPY compl)

GALAMBOS, M.; VITTAY, T.

Disturbances in the renal regulation of fluid and electrolyte balance in acute infectious diseases. Acta Paediat. Acad. Sci. Hung. 2 no.4:329-342 '61.

1. Laszlo Hospital (Director, Dr. J.Roman), Budapest.
(COMMUNICABLE DISEASES compl.) (KIDNEY pathol.)
(WATER-ELECTROLYTE BALANCE)

VITTAY, T.

HUNGARY / General Problems of Pathology. Shock. U-4

Abs Jour : Ref Zhur - Biol., No. 10, 1958, No 46752

Author : Kovach, A. G.; Fonyo, A.; ~~Vittay, T.;~~ Pogatsa, G.
Inst : Academy of Sciences People's Republic of Hungary
Title : Oxygen and Glucose Consumption and Nexokinase Activity in Vitro of Brain Tissue of Rats in Traumatic Shock.

Orig Pub : Acta physiol. Acad. sci. hung., 1957, II, No. 2, 173-180.

Abstract : Brain tissue (microscopic sections and homogenates) of rats was examined after the rats were killed during terminal stages of shock which was caused by liquid air freezing of the animals' both hind legs, or when they were in the state of a severe anoxia following a 2-hour stay in a low pressure chamber (160-180 mm of the mercurial column). Both microscopic sections and homogenates of the cerebral cortex did not show any differences as to glucose consumption. The glucose consumption of the brain tissue did not

Card 1/2

HUNGARY / General Problems of Pathology. Shock. U-4

Abs Jour : Ref Zhur - Biol., No. 10, 1958, No 46752

Abstract : decrease (it decreased, however, in muscular tissue). Hexokinase activity of the brain rose from 3.34 plus/minus 0.08 mg/kg to 4.05 plus/minus 0.08 mg/kg during the period of 5 minutes and the average hourly consumption of O_2 rose from 2.42 to 2.65 mu l/mg. According to data available, in literature, the consumption of hexokinase in arterial hypoxia decreases in the same proportion as the consumption of O_2. Thus, biochemical changes in the brain cannot be ascribed solely to anoxia during shock, for apparently other changes are involved as well.

Card 2/2

VITTAY, T.

FONYO, A.; KOVACH, A.G.B.; VITTAY, T.; POGACSA, G.

In vitro consumption of glucose and ATP synthesis in brain tissue in animals in shock. Acta physiol. hung. Suppl. no.6:25-26 1954.

1. Physiologisches Institut der Medizinischen Universitate, Budapest.
(GLUCOSE, metab.
consumption by brain homogenates in exper. shock)
(SHOCK, exper.
eff. on glucose consumption & ATP synthesis by brain homogenates)
(BRAIN, metab.
glucose consumption & ATP synthesis, eff. of exper. shock)
(ADENYLPHROPHOSPHATE, metab.
synthesis by brain homogenates, eff. of exper. shock)

GALAMBOS, Marton, dr.; VITTAY, Tibor, dr.

Disorders of renal regulation and maintenance of water electrolyte balance in acute infectious diseases in children. Orv.hetil. 102 no.31:1457-1463 30 Jl '61.

1. Fovarosi Laszlo korhaz.

(WATER ELECTROLYTE BALANCE in inf & child)
(COMMUNICABLE DISEASES in inf & child)

KOVACH, Arisztid; FONYO, Attila; VITTAY, Tibor; POGATSA, Gabor

Molecular oxygen and glucose consumption and hexokinase activity in brain tissues in vitro in traumatic shock of rats. Kiserletes orvostud. 9 no.2:179-184 Apr 57.

1. Budapesti Orvostudomanyi Egyetem Elettani Intezete.
(SHOCK, exper.
eff. on oxygen & glucose consumption & hexokinase activity in rat brain tissues (Hun))
(BRAIN,
eff. of exper. shock on glucose & oxygen consumption & hexokinase activity in rat tissues (Hun))
(GLUCOSE, metab.
brain, eff. of exper. shock on consumption in rat tissues (Hun))
(TRANSPHOSPHORYLASES
hexokinase activity in brain, eff. of exper. shock in rats (Hun))

VITTE, M.K.

Order of teaching a course in normal human physiology. Fiziol. zhur. [Ukr.] 1 no.6:133-135 N-D '55. (MLRA 10:1)

1. Vinnits'kiy medichniy institut, kafedra normal'noi fiziologii.
(PHYSIOLOGY—STUDY AND TEACHING)

VITTE, M.

Device for tuning a television set. V pom.radioliub. no.5: 3-14 '58. (MIRA 13:7)
(Television)

Vitte, M K

USSR/General Division. History. Classics. Personnel. A-2

Abs Jour: Ref. Zhur. Biologiia, No 4, 1958, 14153.

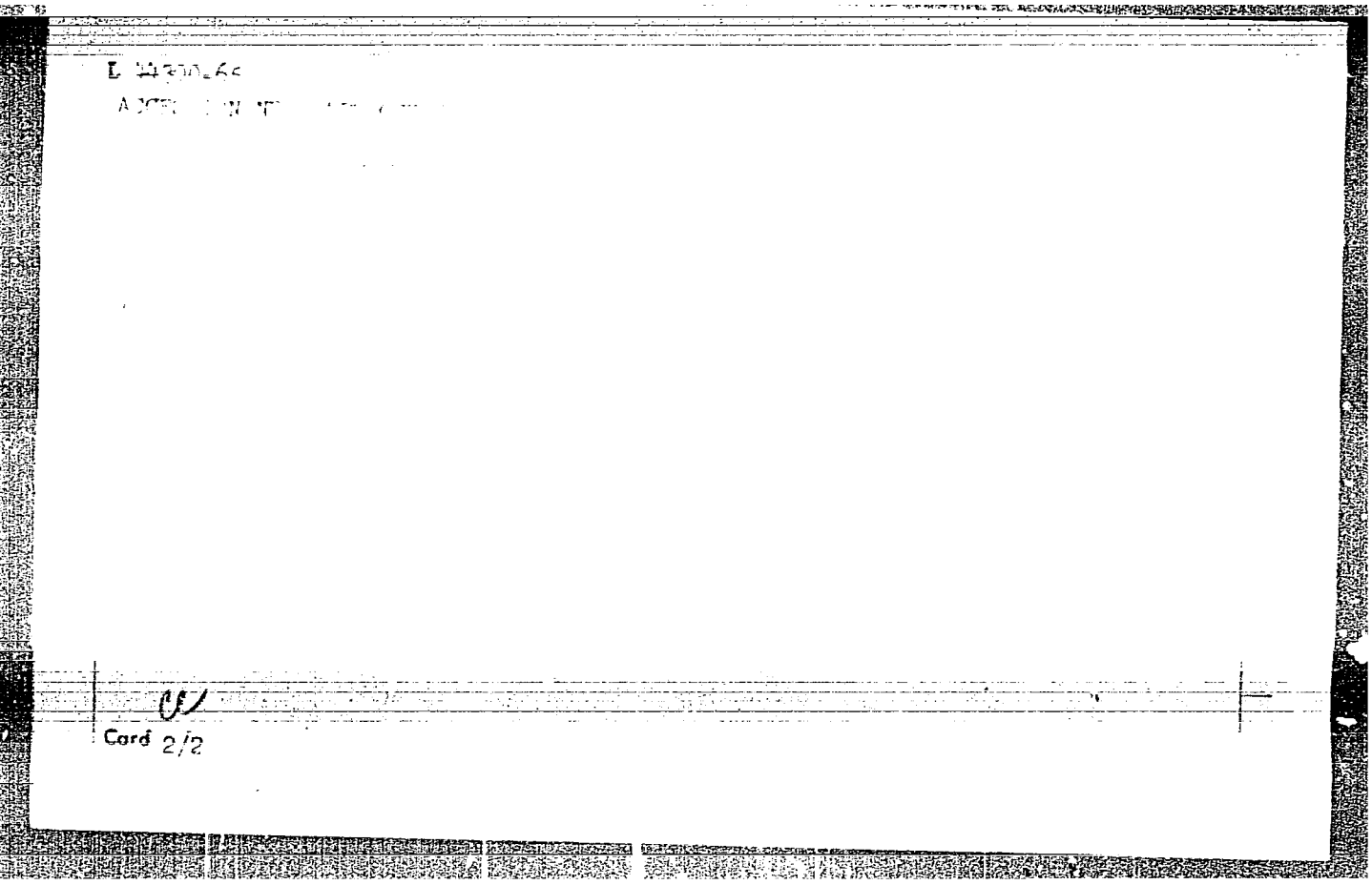
Author : Vitte M.K.
Inst :
Title : Vasiliy Iurevich Chagovets (On the 15th Anniversary of His Death)

Orig Pub: Fiziol. zh. AN URSR, 1956, 2, No 5, 3-11.

Abstract: No abstract.

Card : 1/1

Card 1/



Card 2/2

VITTE, M.K.

Vasil' IUriiovych Chahovets'; on the 15th anniversary of his death. Fiziol.zhur. [Ukr.] 2 no.5:3-11 S-O '56. (MLRA 10:1)
(CHAHOVETS, VASIL' IURIIOVYCH, 1873-1941)

VITTE, M.K., professor; SHUKUPOVA, Ye.A., redaktor; Gitshteyn, A.D., tekhnicheskiy redaktor.

[I.V.Pavlov's teachings concerning the physiology of the higher nervous activity; a manual for the independent study of I.P. Pavlov's works] Uchenie I.P.Pavlova o fiziologii vysshei nervnoi deiatel'nosti; v pomoshch' samostoiatel'no izuchaiushchim trudy I.P.Pavlova. Kiev, Gos. med.izd-vo USSR, 1954. 13. (MLRA 9:5)
(Psychology, Physiological)

VITTE, N.K., prof.; MIZRUKHIN, I.A., prof.; TOPCHIYEVA, Ye.P., kand.med. nauk

Change in thermoregulation in schizophrenics during treatment with aminazine. Vrach. delo no.4:97-100 Ap '61. (MIRA 14:6)

1. Kafedra psikhiatrii (zav. - prof. I.A.Mizrakhin) i kafedra normal'noy fiziologii (zav. - prof.N.K.Vitte) Vinnitskogo medi - tsinskogo instituta.

(SCHIZOPHRENIA) (CHLORPROMAZINE) (BODY TEMPERATURE)

VITTE, N.K.

[Determination of gas exchange in man] Opredelenie gazovogo obmena u cheloveka. Kiev, Gos. Meditsinskoe Izd.-vo USSR, 1955. 51 p.
(Respiration) (MLRA 8:11)

VITTE, N.K.

AID P - 2459

Subject : USSR/Medicine

Card 1/2 Pub. 37 - 6/18

Authors : Bukhovets, V. I., Kand. of Med. Sci., Val'chuk, N. K., Kand. of Biol. Sci., Vitte, N. K., Prof., Gabovich, R.D., Prof., Topchieva, Ye. P., Kand. of Med. Sci.

Title : Comparative physiological and hygienic evaluation of the conditions of work on tractors

Periodical : Gig. i san., 6, 26-33, Je 1955

Abstract : Describes the scientific research work conducted by different departments of the Vinnitsa Medical Institute since January 1954, for the study of health conditions of tractor operators depending on the structural characteristics of caterpillar and wheel tractors of different make, on the type of agricultural work and daily schedule, climate, weather, etc. The investigations were performed chiefly at the Vinnitza Machine Tractor Station Base during the Sowing Campaign of the spring 1954. The effect of noise, of dust content and carbon

Gig. i san., 6, 26-33, Je 1955 AID P - 2459

Card 2/2 Pub. 37 - 6/18

monoxide concentration in the air, and of special structural features of tractors on the physiological reactions of operators are analyzed. Recommendations are made. 4 tables.

Institution: Vinnitsa Medical Institute

Submitted : Sept. 18, 1954

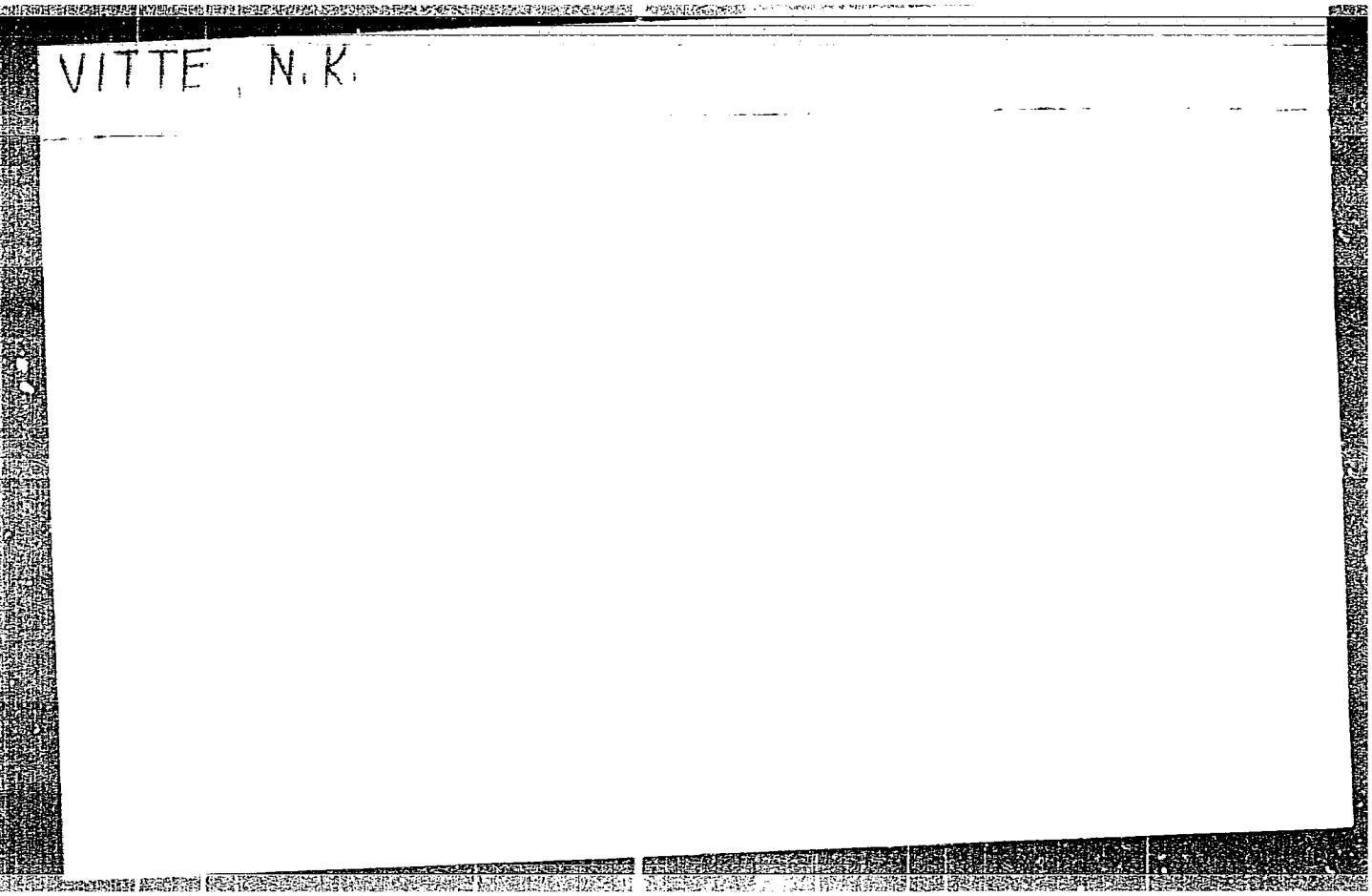
VITTE, N.K.

Characteristics of cardiac function in workers in a hot environment. Fiziol.zhur. (Ukr.) 1 no.4:48-53 Jl-Ag '55. (MLRA 9:11)

1. Kiivs'kiy institut gigieni pratsi i profzakhvoryuvan'.
(ELECTROCARDIOGRAPHY,
ein workers exposed to heat)
(WORK, effects,
on ECG in workers exposed to heat)
(HEAT, effects,
on ECG in workers)

VITTE, Nikolay Karlovich, professor; GLUZMAN, F.A., redaktor; GITTSHEYN, A.D., tekhnicheskiy redaktor

[Thermal exchange in the human body and its hygienic significance] Teplovoi obmen cheloveka i ego gigienicheskoe znachenie. Kiev, Gos. med. izd-vo USSR, 1956. 147 p. (MIRA 10:1)
(BODY TEMPERATURE)



VITTE, N.K.

"Physiology of fatigue and recovery processes" edited by [akademik] G.V.Fol'bort. Reviewed by N.K.Vitte Gig.truda i prof.zab. 3 no.4:60 Jl-Ag '59. (MIRA 12:11)
(PHYSIOLOGY) (FATIGUE) (FOL'BORT)

VITTE, N.K.; MIZRUKHIN, I.A.; TOPCHIYEVA, Ye.P.

Registration of cerebral and cardiac bioelectric potentials in schizophrenics during sleep. Zhur.nevr. i psikh. 59 no.4:416-421 '59. (MIRA 12:6)

1. Kafedra psikhiatrii (zav. - prof.I.A.Mizrukhin) i kafedra fiziologii (zav. - prof.N.K.Vitte) Vinnitskogo meditsinskogo instituta.

(SCHIZOPHRENIA, physiol.
ECG & EEG during sleep (Rus))
(ELECTROCARDIOGRAPHY, in var. dis.
schizophrenia, during sleep (Rus))
(ELECTROENCEPHALOGRAPHY, in var. dis.
same)
(SLEEP, physiol.
ECG & EEG in schizophrenics (Rus))

VITTE, N.K. [Vitte, M.K.]

Thermoregulation in man in the light of cybernetics. Fiziol. zhur. [Ukr.] 11 no.1:32-36 Ja-F '65. (MIRA 18:7)

1. Laboratoriya fiziologii i gigiyeny truda Instituta gerontologii AMN SSSR, Kiyev.

VITTE, Nikolay Karlovich; SIZENKO, S.F., red.

[Development of medical science in the Ukraine] Rozvytok medychnoi nauky na Ukraini. Kyiv, Zdorov'ia, 1965. 51 p. (MIRA 18:9)

VITTE, V. P.

14(10) SOV/99-59-6-13/13

AUTHOR: Sharov, N.A., Engineer

TITLE: Conference on Problems of Crop Irrigation Mechanisation in the USSR

PERIODICAL: Gidrotekhnika i melioratsiya, 1959, Nr 6, pp 61-64, (USSR)

ABSTRACT: The article describes the Conference on Problems of Crops Irrigation Mechanization in the USSR called by the Vsesoyuznyy nauchno-issledovatel'skiy institut mekhanizatsii sel'skogo khozyaystva (All-Union Research Institute of Agriculture Mechanization) and held in Moscow from March 18 to 21, 1959. The conference was dedicated to problems of sprinkling. The following organizations were represented in it: research institutes, water economy corporations, institutions of higher learning, special design offices, planning organizations, industrial enterprises from the Uzbek, Ukrainian, Azerbaydzhan,

Card 1/4

Georgian, Kirgis, Kazakh, Turkmen, and the Moldavian SSR, the RSFSR, as well as the Gosudarstvennyy Nauchno-tekhnicheskiy komitet pri Sovete Ministrov SSSR (State Scientific and Technical Committee attached to the Ministers Council of the USSR), the Giprovodkhoz, and the Ministerstvo sel'skogo khozyaystva SSSR (Ministry of Agriculture of the USSR). In all, the conference was attended by more than 100 specialists and representatives of at least 53 organizations. The conference had its past developments summed up and made several decisions to promote irrigation mechanization. The following reports were delivered there: A.V. Krasnichenko, Director of the VISKhOM, made an introductory speech; G.P. Nechetov, Senior Engineer of the Upravleniye novoy tekhniki i ispytaniya mashin MSKh SSSR (New Equipment and Machinery

Card 2/4

Testing Administration of the MSKh USSR), lectured on "Present-Day Condition and Work Outlook for the Creation of New Sprinklers"; Candidate of Technical Sciences B.M. Lebedev, VISKhOM, - on his institute's laboratory work; Candidate of Technical Sciences S.Kh.Guseyn-Zade, Representative of the AzNIIGiM, - on sprinkling in the Azerbaydzhan SSR; Candidate of Technical Sciences V.I. Kal'nitskiy, GruzNIIGiM, - on sprinkling in the Georgian SSR; N.I. Rychkov, Manager of the Irrigation Engineering Section of the Moskovskaya opytno-issledovatel'skaya dozhdeval'naya stantsiya (Moscow Station for Testing and Sprinkling Research), - on sprinkling in the Moskovskaya Oblast'; V.I. Bogdanovich, Senior Scientific Worker of the UkrNIIGiM, - on sprinkling in the Ukraine; V.P. Vitte, Senior Scientific Worker

Card 3/4

and Representative of the YuzhNIIGiM, - on sprinkling mechanization; A.N. Koryagin, Scientific Worker of the Institut sel'skogo khozyaystva imeni Dokuchayeva (Institute of Agriculture imeni Dokuchayev), -on a mobile sprinkling system in the Central Chernozem Zone; D.I. Sazonov, Chief Agronomist of the Magnitogorskiy molochno-ovoshchnyy sovkhoz (Magnitogorsk Milk and Vegetable-Growing Sovkhoz), - on sprinkling vegetables and potatoes in Southern Ural; Engineer-Hydrotechnician F.N. Yur'yev - on sprinkling cotton at the Sovkhoz "Pakhta-Aral", with an expedition of the SANIIRI doing appraisal work.

ASSOCIATION: Glavodkhoz MSKh SSSR

Card 4/4

USCOMM-DC-61,002

1. VITTE, ZH. A.

2. USSR (600)

4. Dairy Cattle - Latvia

7. Increased yield of cows on state farms of the Latvian S.S.R.
Sots. zhiv. 14 no. 10, 1952

9. Monthly List of Russian Accessions, Library of Congress, January 1953. Unclassified.

HOJA, S.; VITTEK, J.

Effect of royal jelly on regeneration. Folia biol. 9 no.3: 230-232 '63.

1. Department of General Biology, Faculty of Medicine, Comenius University, Bratislava.
(BEES) (WOUND HEALING) (MUSCLES)

-/

CZECHOSLOVAKIA

VITTEK, J; KRESANEK, J

1. Chair of General Biology (Katedra pre vseobecnu biologiu), Bratislava; 2. Chair of Stomatology of the Medical Faculty UK (Katedra stomatologie Lekarskej fakulty UK), Bratislava; 3. Chair of the Pharmacology of the Pharmaceutical Faculty UK (Katedra farmakognozie Farmaceutickej fakulty UK), Bratislava

Bratislava, Farmaceuticky obzor, No 4, 1963, pp 163-169

"Drugs from Higher Plants with an Antibacterial Effect."

VITTEK, Jozef, dr.

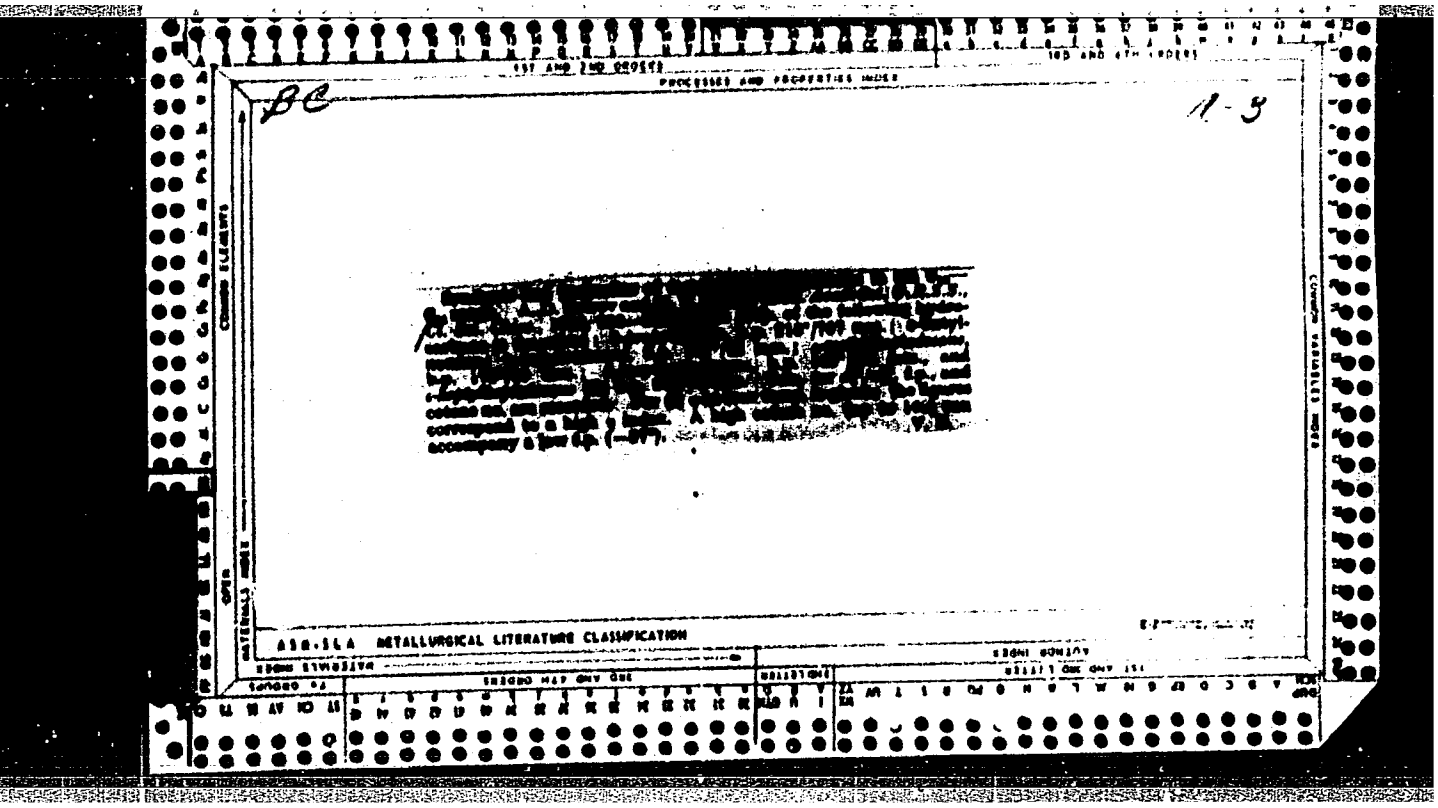
Appropriate extract solutions for acquisition of phytoncides of plants in raw extracts. Biologia 16 no.7:540-544 '61.

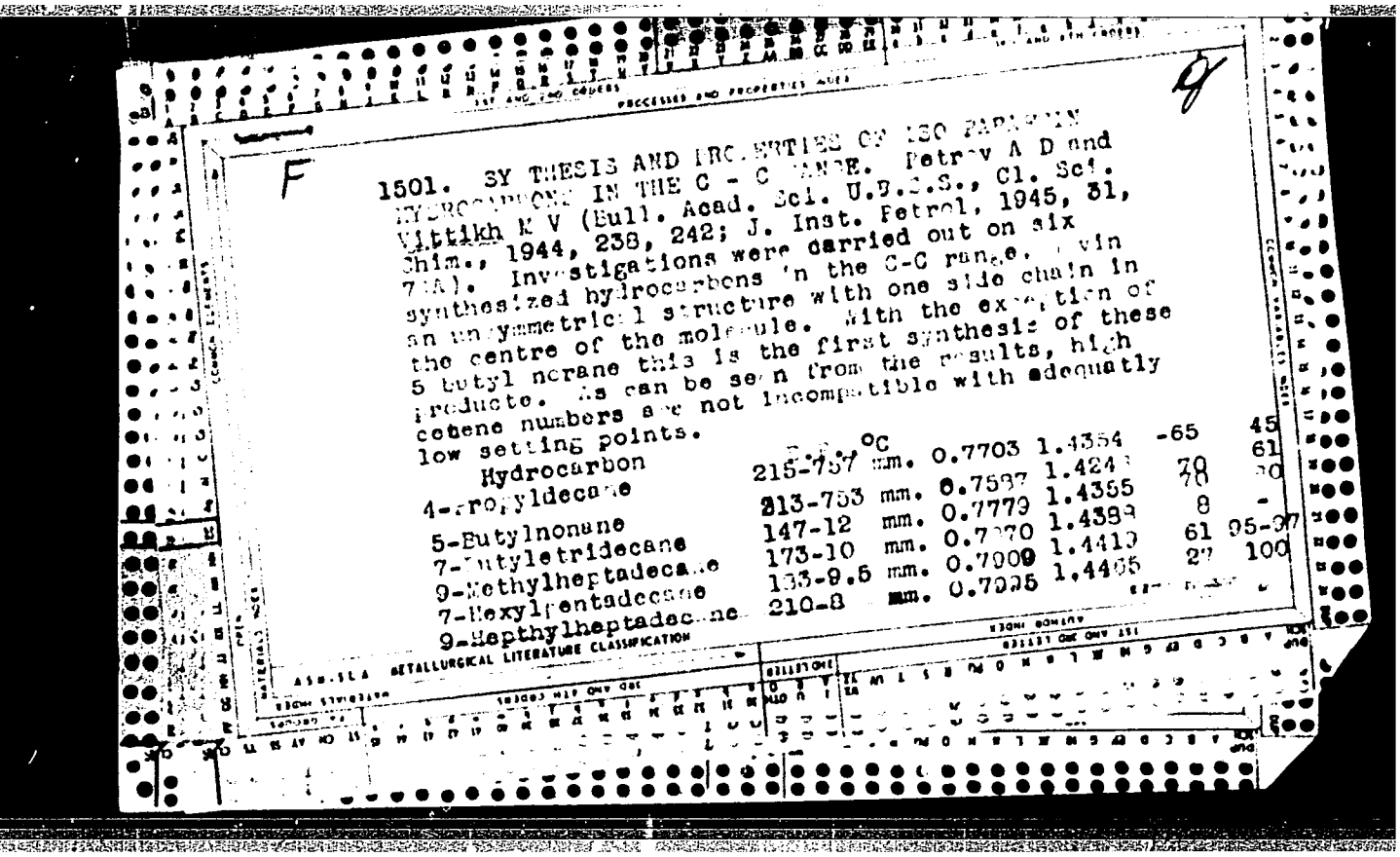
1. Katedra pre vseobecnu biologiu lekarskej fakulty Univerzity Komenskeho, Bratislava, Sasinkova 4/a.

(PHYTONCIDES)

VITTEK, Ludovit (Cerova-Lieskove c.58, okres Senica)

Perfect dissection of a square into 25 squares. Mat fyz cas SAV 14 no.3:234-235 '64.



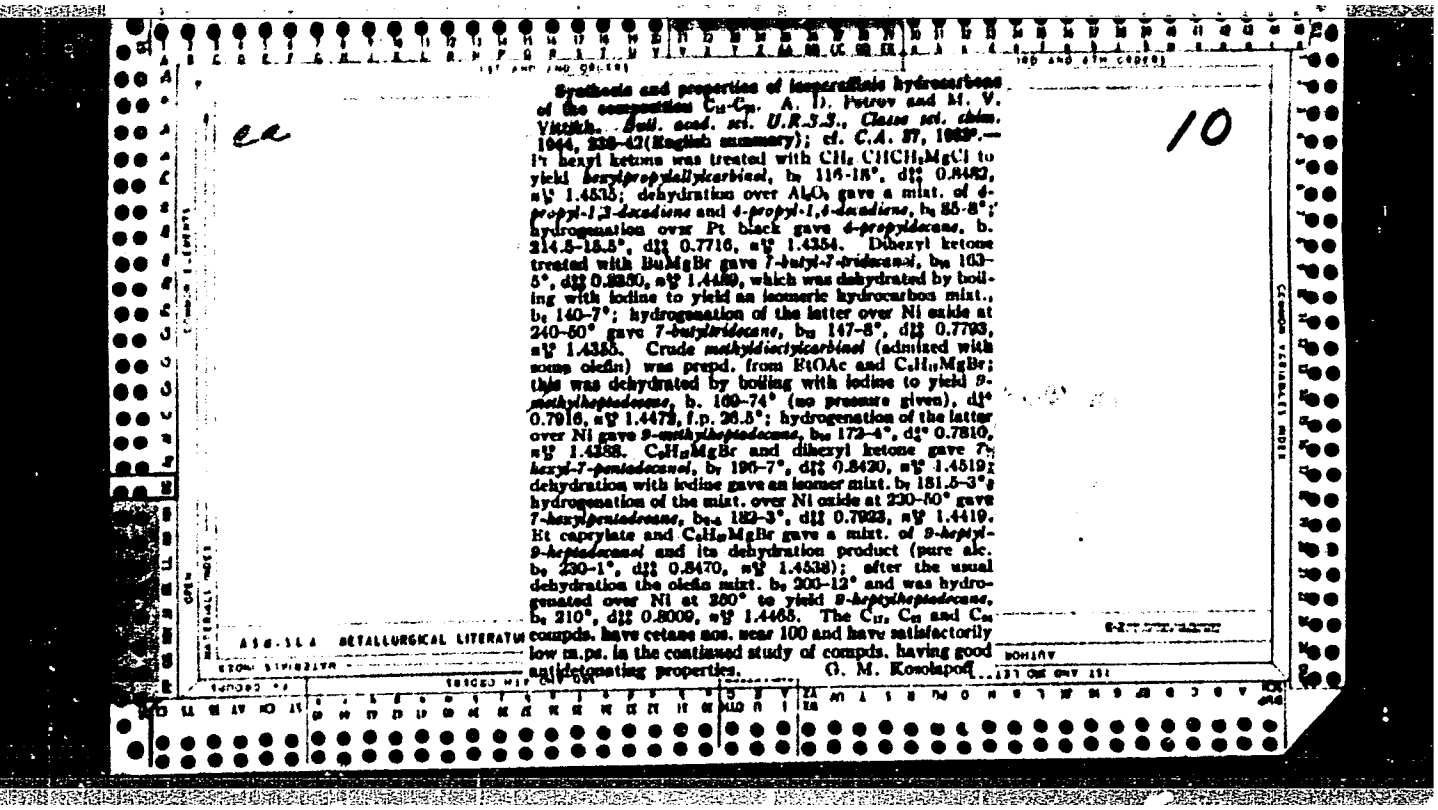


F

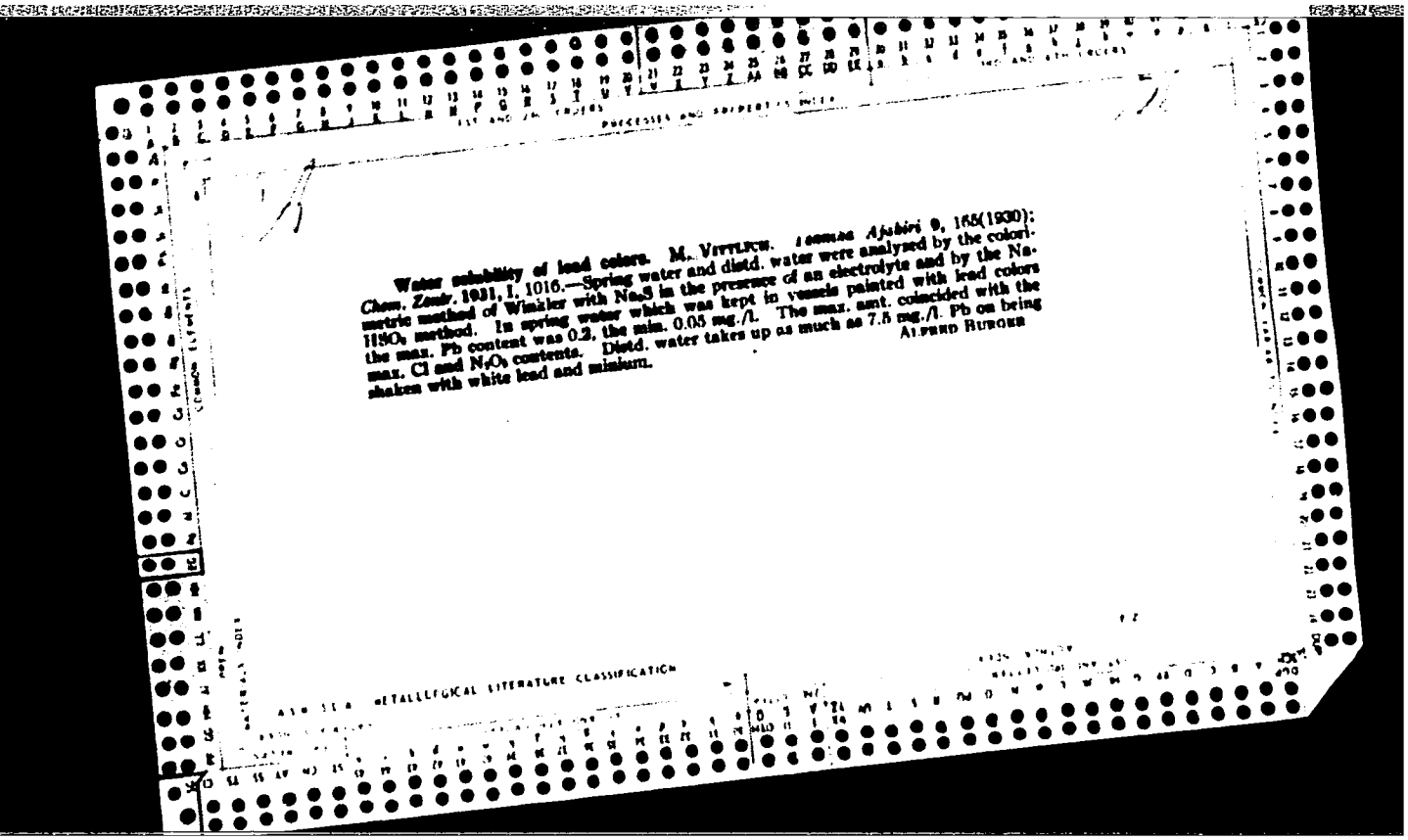
1501. SY THESIS AND PROPERTIES OF ISO PARAFFIN HYDROCARBONS IN THE C - C RANGE. Petrov A D and Vittikh K V (Bull. Acad. Sci. U.S.S.R., Cl. Sci. Chim., 1944, 238, 242; J. Inst. Petrol, 1945, 31, 71A). Investigations were carried out on six synthesized hydrocarbons in the C-C range, with an unsymmetrical structure with one side chain in the centre of the molecule. With the exception of 5 butyl nonane this is the first synthesis of these products. As can be seen from the results, high cetene numbers are not incompatible with adequatly low setting points.

Hydrocarbon	B.P. °C				
4-Propyldecane	215-757	mm.	0.7703	1.4354	-65 45
5-Butylnonane	213-753	mm.	0.7597	1.4243	78 [illegible]
7-Butyletridecane	147-12	mm.	0.7779	1.4355	8 -
9-Methylheptadecane	173-10	mm.	0.7870	1.4389	61 95-97
7-Hexylpentadecane	133-9.5	mm.	0.7809	1.4419	27 100
9-Heptylheptadecane	210-8	mm.	0.7925	1.4405	[illegible]

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



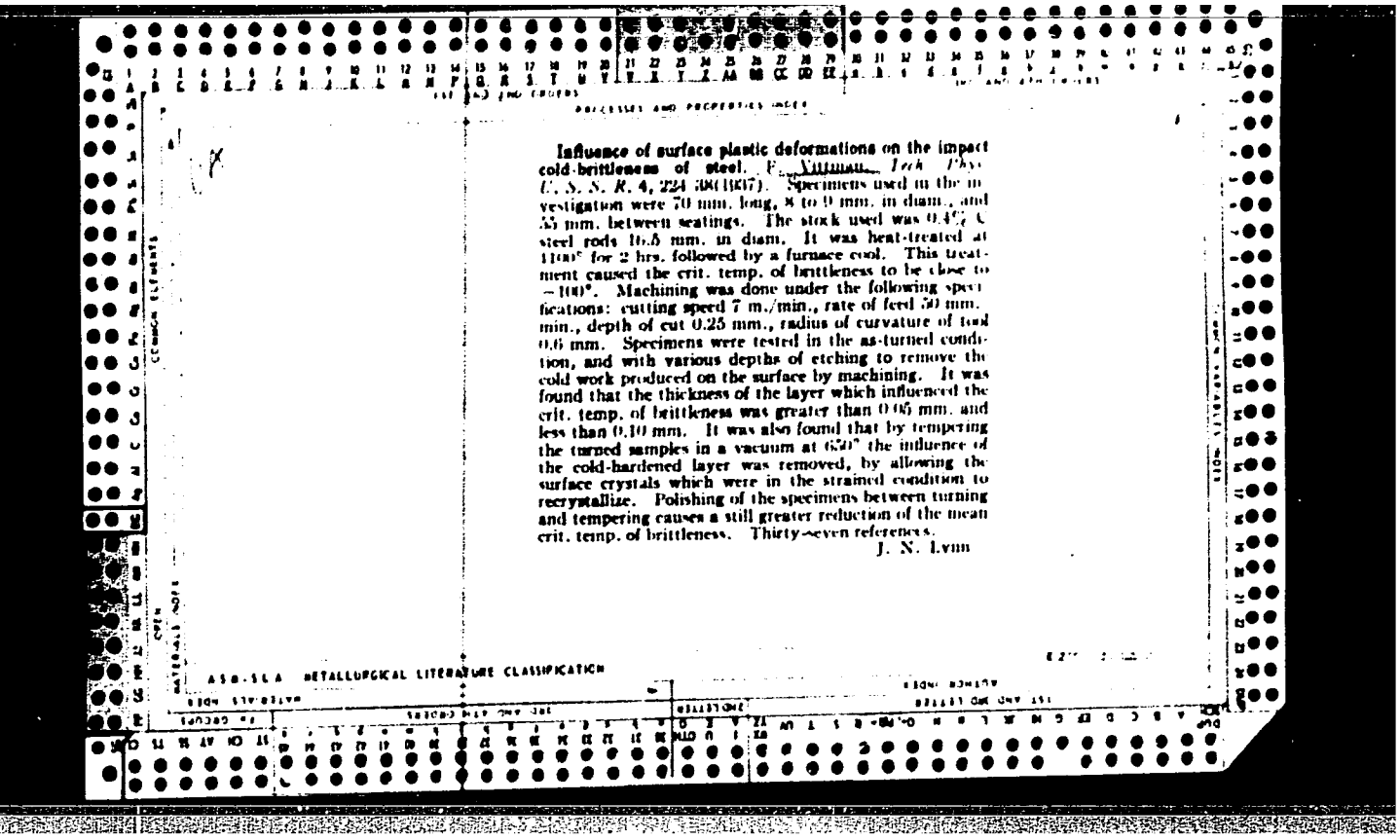
Synthesis and properties of isoparaffinic hydrocarbons of the composition C_{12}-C_{20}. A. D. Petrov and M. V. Vitnikh. *Bull. acad. sci. U.R.S.S., Classe sci. chim.* 1944, 228-42(English summary); cf. *C.A.* 37, 1953⁹.—Et hexyl ketone was treated with $CH_2:CHCH_2MgCl$ to yield *hexylpropylallylcarbinol*, b_5 116-18°, d_4^{15} 0.8482, n_D^{15} 1.4515; dehydration over Al_2O_3 gave a mixt. of *4-propyl-1,3-decadiene* and *4-propyl-1,4-decadiene*, b_5 85-8°; hydrogenation over Pt black gave *4-propyldecane*, b. 214.5-15.5°, d_4^{15} 0.7716, n_D^{15} 1.4354. Dihexyl ketone treated with BuMgBr gave *7-butyl-7-tridecanol*, b_5 163-5°, d_4^{15} 0.8330, n_D^{15} 1.4469, which was dehydrated by boiling with iodine to yield an isomeric hydrocarbon mixt., b_5 140-7°; hydrogenation of the latter over Ni oxide at 240-50° gave *7-butyltridecane*, b_5 147-8°, d_4^{15} 0.7793, n_D^{15} 1.4355. Crude *methyldicetylcarbinol* (admixed with some olefin) was prepd. from EtOAc and $C_{16}H_{33}MgBr$; this was dehydrated by boiling with iodine to yield *9-methylheptadecane*, b. 169-74° (no pressure given), d_4^{20} 0.7916, n_D^{20} 1.4475, f.p. 26.5°; hydrogenation of the latter over Ni gave *9-methylheptadecane*, b_{10} 172-4°, d_4^{20} 0.7810, n_D^{20} 1.4388. $C_5H_{11}MgBr$ and dihexyl ketone gave *7-hexyl-7-pentadecanol*, b_7 196-7°, d_4^{15} 0.8420, n_D^{15} 1.4519; dehydration with iodine gave an isomer mixt. b_7 181.5-3°; hydrogenation of the mixt. over Ni oxide at 230-50° gave *7-hexylpentadecane*, $b_{4.4}$ 182-3°, d_4^{15} 0.7923, n_D^{15} 1.4419. Et caprylate and $C_9H_{19}MgBr$ gave a mixt. of *9-heptyl-9-heptadecanol* and its dehydration product (pure alc. b_5 230-1°, d_4^{15} 0.8470, n_D^{15} 1.4538); after the usual dehydration the olefin mixt. b_5 200-12° and was hydrogenated over Ni at 260° to yield *9-heptylheptadecane*, b_5 210°, d_4^{15} 0.8009, n_D^{15} 1.4465. The C_{12}, C_{16} and C_{20} compds. have cetane nos. near 100 and have satisfactorily low m.ps. in the continued study of compds. having good antidetonating properties. G. M. Kosolapoff



Water solubility of lead colors. M. Vittfleur. *Chem. Zentr.* 1931, I, 1016.—Spring water and distd. water were analyzed by the colorimetric method of Winkler with Na_2S in the presence of an electrolyte and by the Na_2SO_3 method. In spring water which was kept in vessels painted with lead colors the max. Pb content was 0.2, the min. 0.05 mg./l. The max. amt. coincided with the max. Cl and N_2O_5 contents. Distd. water takes up as much as 7.5 mg./l. Pb on being shaken with white lead and minium.

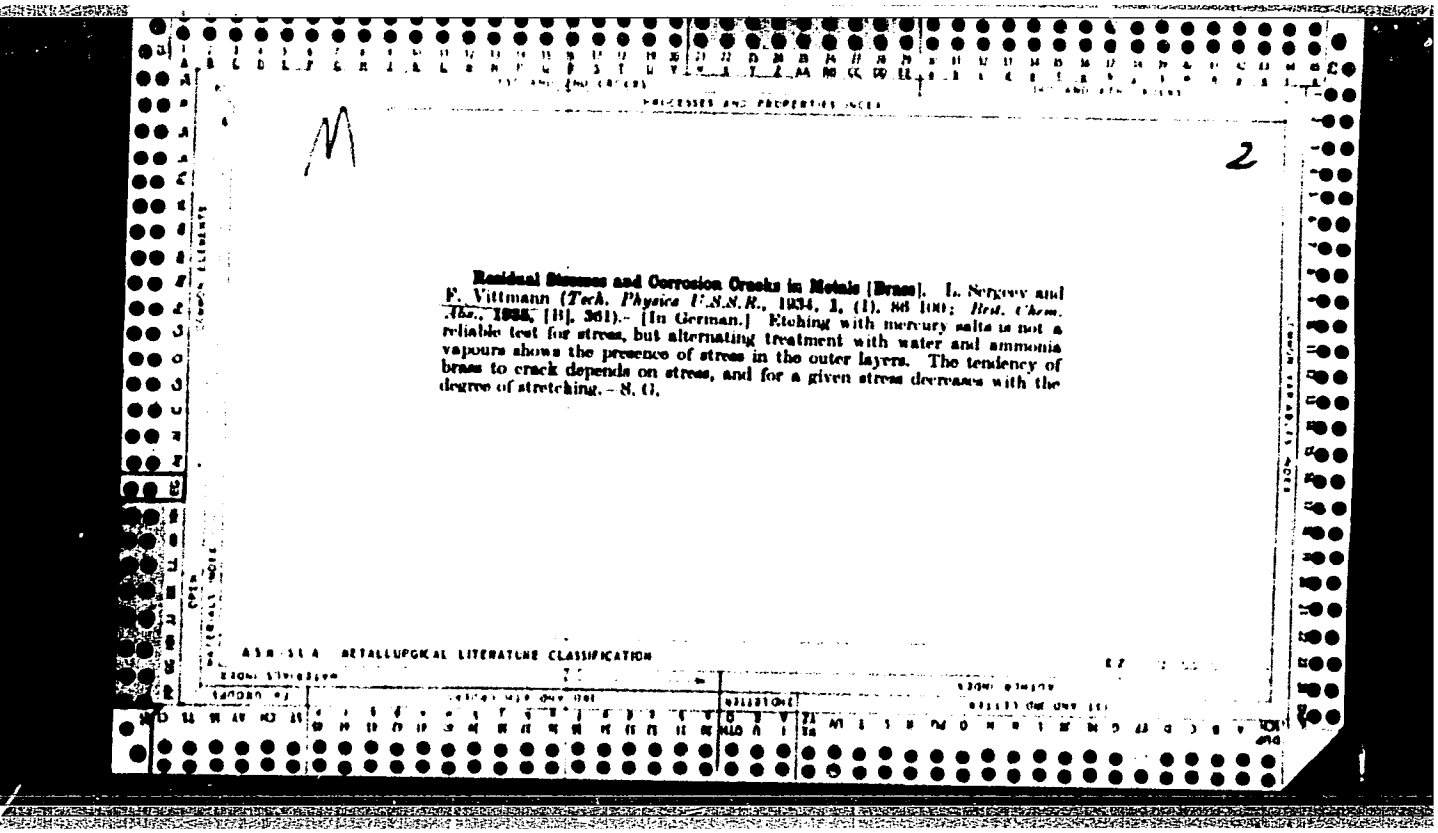
Alfred Burgess

METALLURGICAL LITERATURE CLASSIFICATION

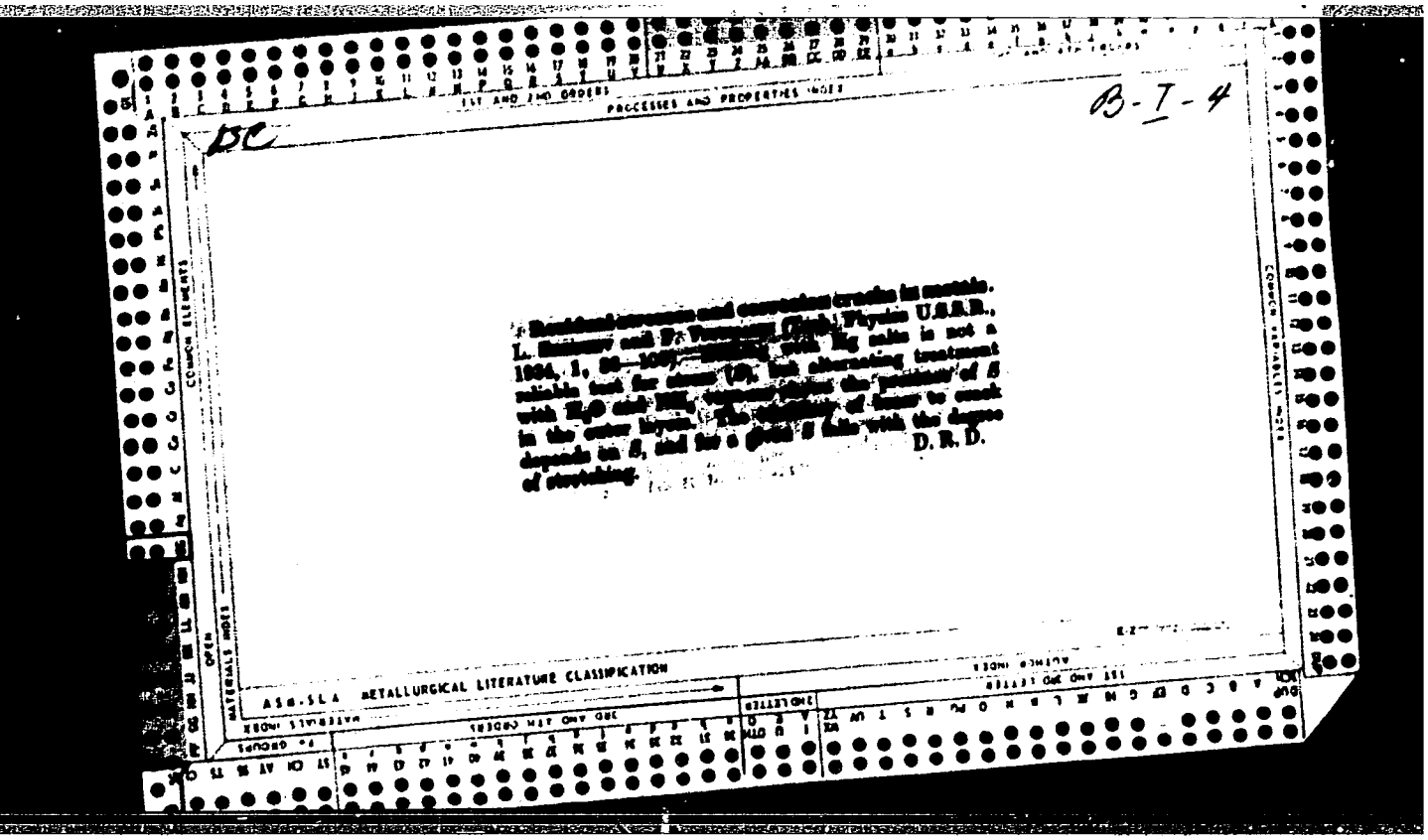


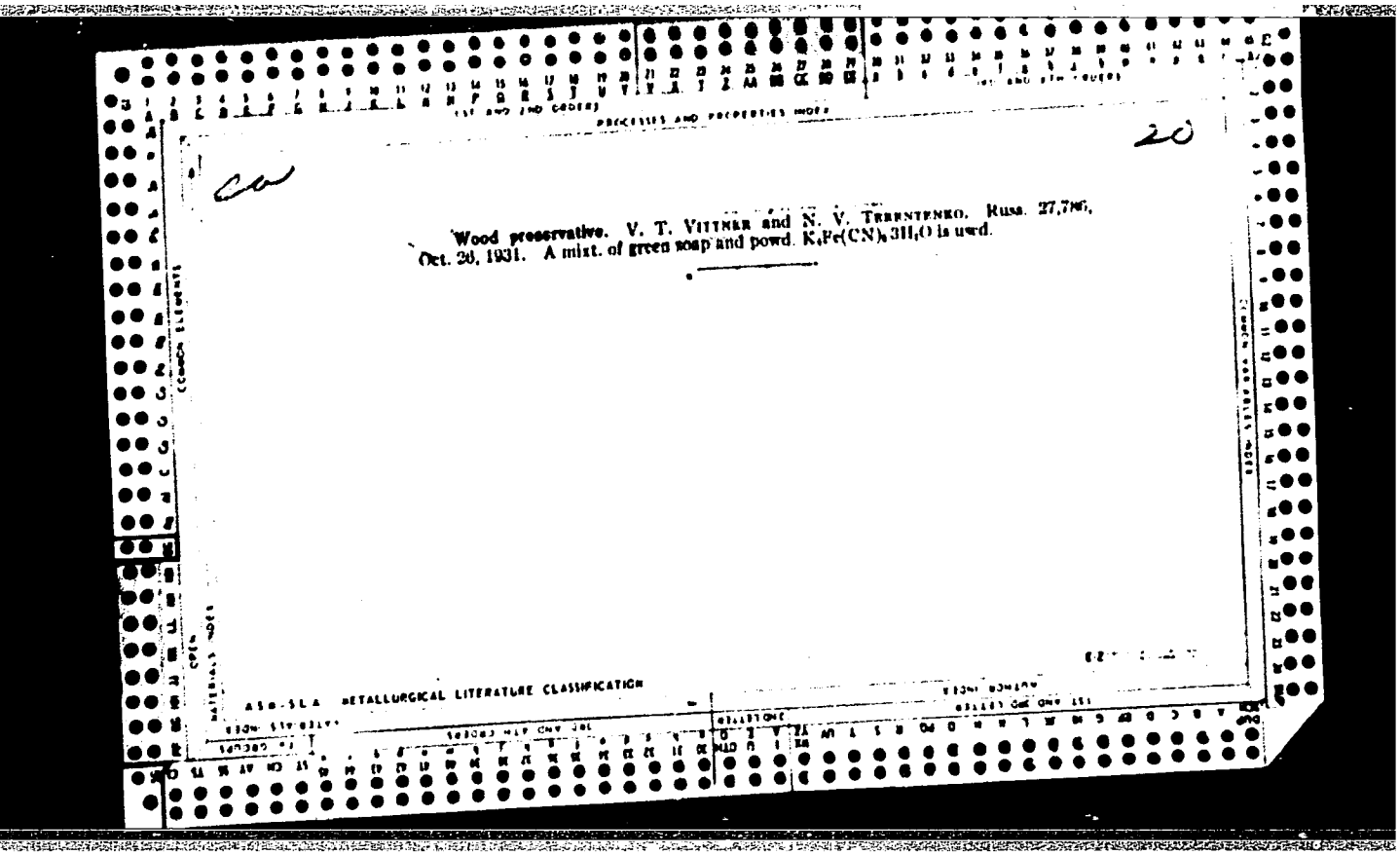
Influence of surface plastic deformations on the impact cold-brittleness of steel. F. Yurman. *Tech. Phys. U. S. S. R.* 4, 224-30(1937). Specimens used in the investigation were 70 mm. long, 8 to 9 mm. in diam., and 55 mm. between seatings. The stock used was 0.4% C steel rods 10.5 mm. in diam. It was heat-treated at 1100° for 2 hrs. followed by a furnace cool. This treatment caused the crit. temp. of brittleness to be close to −100°. Machining was done under the following specifications: cutting speed 7 m./min., rate of feed 50 mm./min., depth of cut 0.25 mm., radius of curvature of tool 0.6 mm. Specimens were tested in the as-turned condition, and with various depths of etching to remove the cold work produced on the surface by machining. It was found that the thickness of the layer which influenced the crit. temp. of brittleness was greater than 0.05 mm. and less than 0.10 mm. It was also found that by tempering the turned samples in a vacuum at 620° the influence of the cold-hardened layer was removed, by allowing the surface crystals which were in the strained condition to recrystallize. Polishing of the specimens between turning and tempering causes a still greater reduction of the mean crit. temp. of brittleness. Thirty-seven references.

J. N. Lyon



Residual Stresses and Corrosion Cracks in Metals [Brass]. L. Sergeev and F. Vittmann (*Tech. Physics U.S.S.R.*, 1934, 1, (1), 86 [in]; *Brit. Chem. Abs.*, 1935, [B], 361).– [In German.] Etching with mercury salts is not a reliable test for stress, but alternating treatment with water and ammonia vapours shows the presence of stress in the outer layers. The tendency of brass to crack depends on stress, and for a given stress decreases with the degree of stretching.– S. G.





Wood preservative. V. T. VITTNER and N. V. TRENTENKO. Russ. 27,786, Oct. 30, 1931. A mixt. of green soap and powd. $K_4Fe(CN)_6 \cdot 3H_2O$ is used.

SELIVERSTOVA, L.Ya.; VITTENBERG, F.I.

Purification of hydrogen in a highly efficient mechanical absorber. Masl.-zhir.prom. 26 no.1:34-36 Ja '60. (MIRA 13:4)

1. Mosgidrozavod.
(Hydrogen) (Absorption)

VITTENBERG, F.I.; SELIVERSTOVA, L.Ya.

Drying of hydrogen by silica gel. Masl.-zhir.prom. 25 no.11:15-17 '59. (MIRA 13:3)

1. Mosgidrozavod.
(Hydrogen)

VITTENBURG, Pavel Vladimirovich; DEN'GIN, Yu.F., red.; TOKAREVA, T.N., ved. red.

[Practical handbook for geological engineers] Prakticheskoe rukovodstvo dlia tekhnikov-geologov. Izd.2., perer. i dop. Leningrad, "Nedra", 1964. 486 p. (MIRA 17:8)

1. VITTE, Zh. A.

2. USSR (600)

4. Latvia - Dairy Cattle

7. Increased yield of cows on state farms of the Latvian S.S.R. Sots. zhiv. 14, No. 10, 1952.

9. Monthly List of Russian Accessions, Library of Congress, January 1953. Unclassified.

BELONOZHKO, G.A., kandidat meditsinskikh nauk; VITTE-DROZDOVSKAYA, V.I., kandidat meditsinskikh nauk; KEFMLI, Ye.I., [deceased] kandidat meditsinskikh nauk; SHCHEPOTIN, B.M., kandidat meditsinskikh nauk

Using unithiol, a new antidote, in poisoning by arsenic and mercury compounds. Vrach. delo no.1:87 Ja '57 (MLRA 10:4)
(ARSENIC--TOXICOLOGY) (THIOLS) (MERCURY--TOXICOLOGY)

"Use of the New Antidote Unithiol in Intoxications by Arsenic and Mercury Compounds," by Candidates of Medical Sciences G. A. Belonozhko, V. I. Vitte-Drozdovskaya, Ye. I. Kefeli, and B. M. Shchepotin, Chair of Therapy, Sanitary-Hygiene Faculty, Kiev Medical Institute and Laboratory of Experimental Therapy, Ukrainian Scientific-Research Sanitary-Chemical Institute, Vrachebnoye Delo, No 1, Jan 57, p 87

The article reports results of the use of unithiol in the therapy of intoxications by arsenic and mercury compounds. Most of the patients were in serious condition when received at the clinic. Treatment with unithiol began at various times following intoxications. In additon to unithiol, other means of therapy were administered, i.e., washing of the gastro-intestinal tract, subcutaneous injections of 5 percent solutions of glucose and physiological solution, and cardiac stimulants. All the patients recovered and were released in a satisfactory condition. Unithiol produced no side effects. On the basis of the results obtained, it was concluded that unithiol was an effective therapeutic agent in intoxications caused by arsenic and mercury compounds. (U)

54M.1322

IVANOVA, R.M.; ASHRAFI, R.I.; BURIKOVA, Ye.M.; VITTENBERG, Z.V.; ZARETSKAYA, A.R.; NAZAR'YEVA, M.S.; RAFIYENKO, D.V.; BURAKOVA, G.Ye.; KUTSENKO, I.T.; KAS'YANOVA, Ye.M.; PERSHIN, S.P., inzh.

Observations on the stability of track. Put' i put.khoz. no.10:6-7 O '59. (MIRA 13:2)

1. Studenty Moskovskogo instituta inzhenerov zheleznodorozhnogo transporta (for all except Pershin).
(Railroads--Track)

VITTENBURG, P.V.; SHVEDE, Ye.Ye., prof., kontr-admiral, otv.red.; PROLOV, A.A., red.izd-va; KRUGLIKOVA, N.A., tekhn.red.

[Life and scientific work of E.V.Toll']. Zhizn' i nauchnaia deiatel'nost' E.V.Tollia. Moskva, Izd-vo Akad.nauk SSSR, 1960. 243 p. (MIRA 13:3)
(Toll', Eduard Vasil'evich, 1858-1902)

[illegible], Pavel Fedorovich, [illegible]

The Arctic countries, 1914-1924. Leningrad, Redaktsionno-izdatel'skii otdel Morskogo vedomstva, 1924. 182 p. maps. (51-53458)

G580.K3

1. Arctic regions. 2. Antarctic regions

VITTENBURG, P. V.

Thermal Regime and well water in the Permafrost zones of Vaygach and Amderma Islands. Problemy Arktiki. No 9, 1939

SO: Trudy Arkitcheskogo Nauchno-Issledovatel'skogo Instituta, GUSMP, Council of Ministers, Vol 201, 1948

TOLL, Eduard Vasil'yevich, Baron von; VITTENBURG, Z.I. [translator]; VITTENBURG, P.V., red.

[Voyage in the yacht "Zaria"] Plavanie na iakhte "Zaria." Moskva, Gos.izd-vo geogr.lit-ry, 1959. 337 p. [Translated from the German]. (MIRA 12:6)
(Arctic regions)

VITTENBURG, Pavel Vladimirovich, 1884-

Iron ore deposits in the region of the Gulf of Kolsk. Petrograd, 2. Gos. tip., 1920. 7 p.
(Trudy Severnoi nauchno-promyslovoi ekspeditsii, vyp. 4)

Cyr.4 TN59

1. Iron ores - Russia, Northern.

VITTENBURG, Pavel Vladimirovich.

VITTENBURG, Pavel Vladimirovich. Mestorozhdenie zheleznoi rudy raiona Kol'skogo zaliva. Petrograd, 1920. (Trudy Severnoi nauchno-promyslovoi ekspeditsii, no. 4)

DLC: Unclass.

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

VITTENBURG, Pavel Vladimirovich

VITTENBURG, Pavel Vladimirovich.....Mestorozhdenie zheleznoi rudy v raione Kol'skogo zaliva. Petrograd, 1920. 7 p. (Trudy Severnoi nauchno-promyslovoi ekspeditsii; vyp. 4). DLC: Unclass.

SO: LC, Soviet Geography, Part II, 1951/Unclassified

VITTENBURG, Pavel Vladimirovich

VITTENBURG, Pavel Vladimirovich, ed. ... Problèmes géophysiques de la Iakoutie. Recueil d'articles avec ... un résumé en anglais. Leningrad, 1928. ix, 252, p. (Akademiia Nauk. Komissiia po izucheniiu IAkutskoi avtonomnoi sovetskoi sotsialisticheskoi respubliki. Materialy. Vyp. 11.)
Text in Russian.
Bibliography in footnotes to Préface.
NN

SO: IC, Soviet Geography, Part II, 1951/Unclassified

BOYTSOVA, Ye.P.; VITTENBURG, P.V.; GANESHIN, G.S.,; GROMOV, V.I.,; ZUBAKOV, V.A.; IVANOVA, I.K.; KRASNOV, I.I.; LUNGERSGAUZEN, G.F.,; NIKIFOROVA, K.V.; POKROVSKAYA, I.M.; CHEMEKOV, Yu.F.; EPSHTEYN, S.V.; YAKOVLEVA, S.V.

Sergei Aleksandrovich IAkovlev; obituary. Biul.Kom.chetv.per. no.23:97-101 '59. (MIRA 13:5)
(IAkovlev, Sergei Aleksandrovich, 1879-1957)
(Geology)

VITTENBURG, Pavel Vladimirovich

VITTENBURG, Pavel Vladimirovich. IAkutiia; sbornik statei; pod red. P.V. Vittenburga. Leningrad, AN SSSR, 1927. 746 p. DLC: DK771.I2W8
CSt CSt-H CtY ICU MiU NN

SO: IC, Soviet Geography, Part II, 1951/Unclassified

VITTENBERGER, N.G. (Mukachevo, Zakarpatskoy obl., ul. Bogomol'tsa, d.1)

Apparatus for gastric resection and closed gastrointestinal anastomoses and our experience in using it. Nov.khir.arkh. no.1:74-77 Ja-F '58

1. Khirurgicheskoye otdeleniye (zav. - N.G. Vittenberger) Mukachevskoy gorodskoy bol'nitsy.
(ALIMENTARY TRACT--SURGERY)
(SURGICAL INSTRUMENTS AND APPARATUS)

TOLL, Eduard Vasil'yevich, Baron von; VITTENBURG, Z.I. [translator]; VITTENBURG, P.V., red.

[Voyage in the yacht "Zaria"] Plavanie na iakhte "Zaria." Moskva, Gos.izd-vo geogr.lit-ry, 1959. 337 p. [Translated from the German]. (MIRA 12:6)

(Arctic regions)

VITTER, L.M.

Two cases of pregnancy in the rudimentary horn of the uterus.
Zdrav.Turk. 3 no.3:37-39 My-Je '59. (MIRA 12:11)

1. Glavnyy akusher-ginekolog Maryyskogo oblzdravotdela.
(PREGNANCY, COMPLICATIONS OF)

VITTER, V., serzhant

Make such an apparatus. Starsh.-serzh. no.8:30 Ag '61.
(MIRA 14:10)

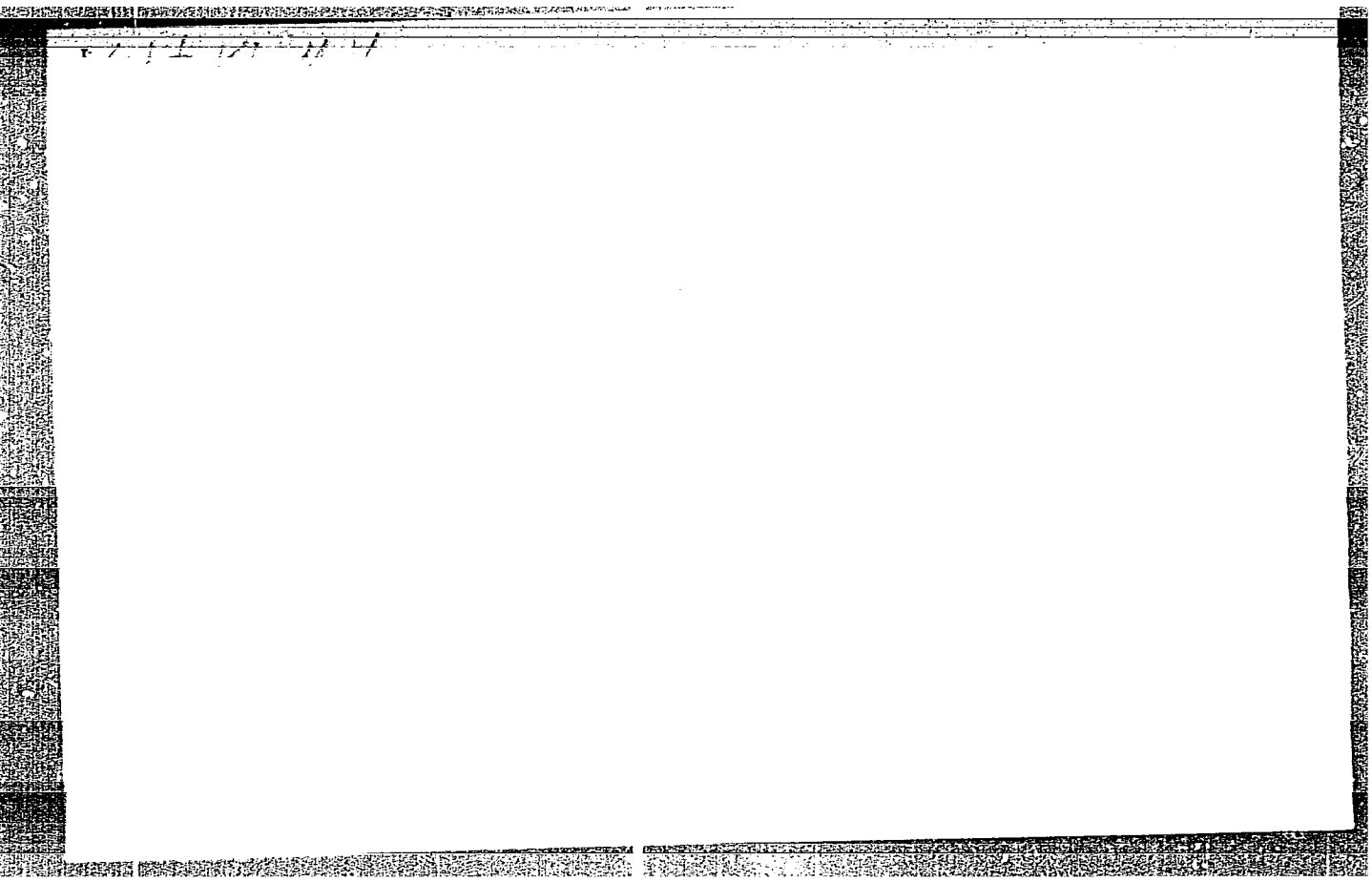
(Electric coils--Testing)
(Electric power supply to apparatus)

VITTIG, G.

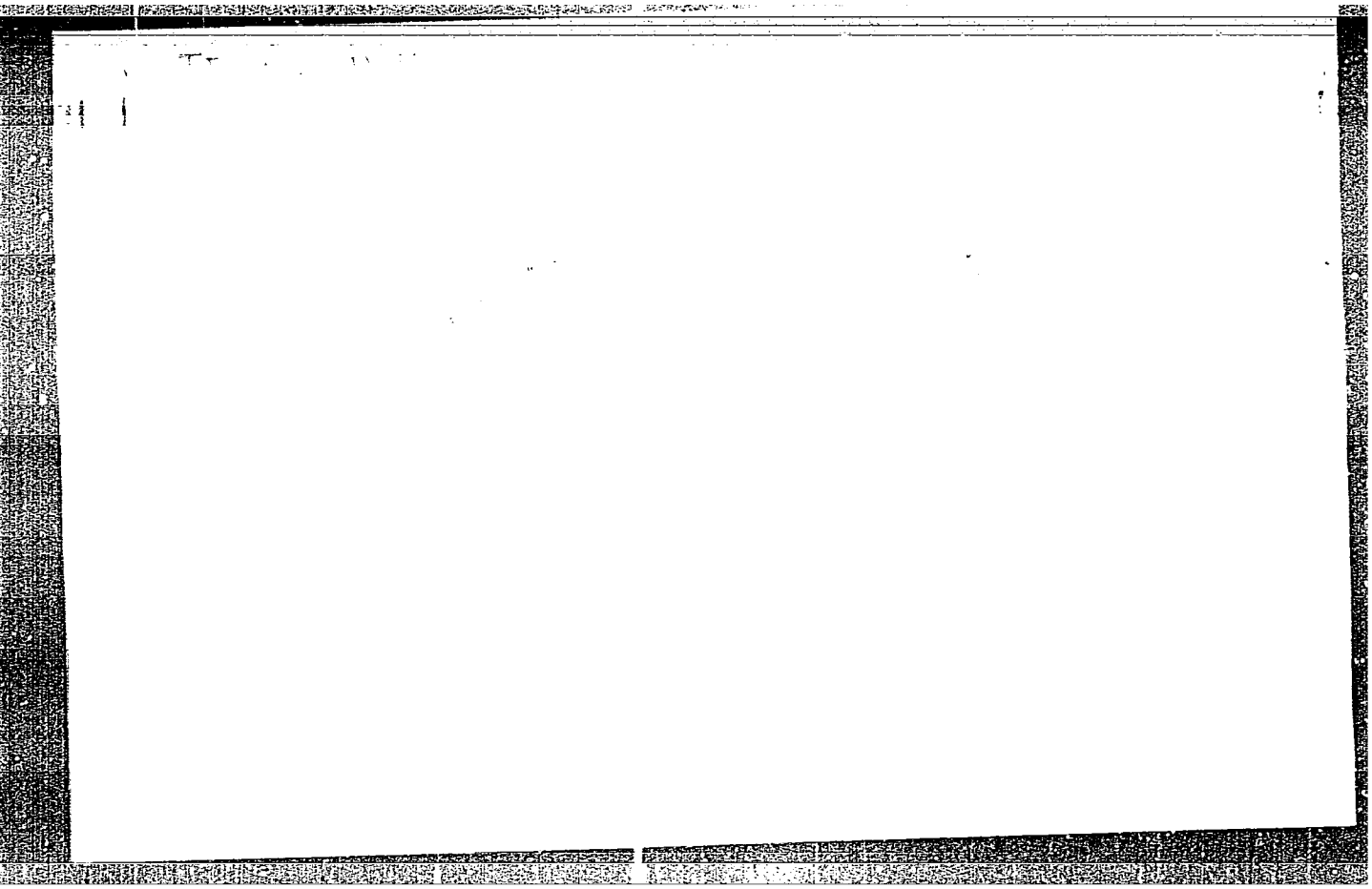
Formation and reactions of dihydrobenzene (cyclohexadiene).
Usp. khim. 27 no.3:291-305 Mr '58. (MIRA 11:4)
(Cyclohexadiene)

VITTIG, G. [Wittig, G.] prof., (Federativnaya Respublika Germanii)

Cyclic acetylenic hydrocarbons with a small number of carbon atoms in the ring. Zhur. VKHO 7 no.4:362-366 '62. (MIRA 15:8)
(Hydrocarbons) (Acetylene compounds)



APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001860130001-1"



APPROVED FOR RELEASE: 09/01/2001 CIA-RDP86-00513R001860130001-1"

SHAROVA, A.K.; CHUFAROVA, I.G.; VITTIKH, M.V.; SHOSTAK, F.T.

Recovery of germanium from dilute solutions by an ion exchange method. Izv. Sib. otd. AN SSSR no.8:36-42 '59. (MIRA 13:2)

1.Ural'skiy filial AN SSSR.
(Germanium--Analysis) (Ion exchange)

VITTIKH, M.V.; GOROKHOLINSKIY, Yu.S.

Ural Scientific and Industrial Conference on Ion Exchange Resins. Plast.massy no.3:77-79 '60. (MIRA 13:6)
(Ion exchange--Congresses) (Resins, Synthetic)

SHOSTAK, F.T.; VITTIKH, M.V.; SHAROVA, A.K.; CHUFAROVA, I.G.

Separation of germanium by an ion exchange method. Izv.Sib.otd. AN SSSR no.8:69-74 '60. (MIRA 13:9)

1. Nizhne-Tagil'skoye otdeleniye Nauchno-issledovatel'skogo instituta plasticheskikh mass i Ural'skiy filial AN SSSR.
(Germanium) (Ion exchange)

CHERNOBROV, S.M., otv. red.; LASKORIN, B.N., red.; KLYACHKO, V.A., red.; MATEROVA, Ye.A., red.; LANGE, A.Z., red.; VITTIKH, M.V., red.; SHOSTAK, F.T., red.; SAVENKO, O.D., red.; ZYKOVA, V.V., red.; GLAZYRINA, D.M., red.; ALFEROVA, P.F., tekhn. red.

[Theory and practice of ion exchange] Teoriia i praktika ionnogo obmena; trudy. Alma-Ata, Izd-vo AN Kaz.SSR, 1963. 186 p. (MIRA 17:3)

1. Kazakhstanskoye respublikanskoye nauchno-tekhnicheskoye soveshchaniye po ionnomu obmenu. 1962. (MIRA 17:3)

ACCESSION NR: AT4042427 S/0000/63/000/000/0094/0095

AUTHOR: Samborskiy, I. V.; Vittikh, M. V.

TITLE: Accelerating the process of preparation of polyethylenepolyamines

SOURCE: Respublikanskoye nauchno-tekhnicheskoye soveshchaniye po ionnomu obmenu. Alma-Ata, 1962. Teoriya i praktika ionnogo obmena (Theory and practice of ion exchange); trudy* soveshchaniya. Alma-Ata, Izd-vo AN KazSSR, 1963, 94-95

TOPIC TAGS: polyethylenepolyamine, resin, ion exchange resin, resin AN-2F, ethylenediamine, diethylenetriamine

ABSTRACT: The synthesis of a low-base anion exchange resin, AN-2F, was modified by reacting dichloroethane with gaseous ammonia in the presence of water, rather than in aqueous ammonia solution. The proportion of water in the mixture is reduced from 125% to 40% of the amount of reacting dichloroethane, and the temperature of the mixture, preheated to 110-115C, is maintained at 120-125C by the heat of reaction, varying the rate of ammonia supply. This technique permits simplification and reduction of the costs of the current AN-2F polyethylenepolyamine technology by eliminating two steps from the process: the preparation of the hydrochlorides of the polyethylenepolyamines, and decomposition of the hydrochlorides to yield the free bases. Small amounts of the light fractions of poly-

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ACCESSION NR: AT4042427

ethylenepolyamines, such as ethylenediamine and diethylenetriamine, do not impair the properties of the AN-2F. The product obtained by the proposed method is in no way inferior to the product of the current technology.

ASSOCIATION: Institut khimicheskikh nauk AN KazSSR (Institute of Chemical Sciences, AN KazSSR); Nizhnetagil'skiy filial NIIPM (Nizhnetagil'sk Branch of the NIIPM)

SUBMITTED: 13Nov63 ENCL: 00

SUB CODE: OC NO REF SOV: 003 OTHER: 000

Card 2/2

GBR

ACCESSION NR: AT4042429 S/0000/63/000/000/0099/0100

AUTHOR: Vittikh, M. V.; Aymanshin, I. A.

TITLE: The problem of the selection of solvents for the synthesis of ion exchange resins

SOURCE: Respublikanskoye nauchno-tekhnicheskoye soveshchaniye po ionnomu obmenu. Alma-Ata, 1962. Teoriya i praktika ionnogo obmena (Theory and practice of ion exchange) trudy* soveshchaniya. Alma-Ata, Izd-vo AN KazSSR, 1963, 99-100

TOPIC TAGS: resin, ion exchange resin, resin synthesis, polyethylenepolyamine, dibromoethane

ABSTRACT: The authors discuss the difficulties encountered in selecting common solvents for the reactants in the synthesis of certain ion exchange resins, due to the violent character of the reaction which necessitates limitation of the direct contact of the reactants. The problem is all the more difficult when polar substances interact with nonpolar. For the synthesis of an anion exchange resin from nonpolar polyethylenepolyamines and polar dibromoethane, the authors recommend the slow addition of 3:1 aqueous dibromoethane emulsion at 40-60C to a 1:1 aqueous polyethylenepolyamine solution. The dried gel is then crushed and sifted. The product is homogeneous and has adequate static exchange capacity, swelling abili-

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ACCESSION NR: AT4042429

ty and oxidizability. The method is suitable for a large variety of reactants used in the synthesis of ion exchange resins.

ASSOCIATION: Institut khimicheskikh nauk AN KazSSR (Institute of Chemical Sciences, AN KazSSR)

SUBMITTED: 13Nov63 ENCL: 00

SUB CODE: OC NO REF SOV: 000 OTHER: 000

2/2
Card

ACCESSION NR: AT4042419 S/0000/63/000/000/0043/0045

AUTHOR: Shostak, F. T.; Vittikh, M. V.; Savel'yeva, G. A.; Kozlov, G. S. Malinovskiy, L. S.

TITLE: The influence of ultrasound on the kinetics of ion exchange

SOURCE: Respublikanskoye nauchno-tekhnicheskoye soveshchaniye po ionnomu obmenu. Alma-Ata, 1962. Teoriya i praktika ionnogo obmena (Theory and practice of ion exchange); trudy* soveshchaniya. Alma-Ata, Izd-vo AN KazSSR, 1963, 43-45.

TOPIC TAGS: ion exchange, ion exchange kinetics, ultrasound, cation exchange resin, anion exchange resin, resin regeneration

ABSTRACT: An UZGI-1.5 ultrasonic generator in an auto-exciting circuit with three GU-80 tubes fed without rectifying directly from a three-phase a.c. grid was used in a study of the effects of ultrasound on ion exchange in an acid cation exchange resin (KU-21) and two alkaline anion exchange resins (EDE-10P and AN-1). The H form of the cation exchange resin and the OH form of the anion exchange resins in 1.0 and 0.1 N aqueous solutions of KOH or 1.0, 0.1 and 0.01 N aqueous solutions of hydrochloric acid, respectively were exposed to ultrasound for 3, 7, 15, 25 and 45 minutes with an intensity of 3.0 w/cm^3 at room temperature. The tests generally showed that imposition of an ultrasonic field intensifies ion exchange in the initial stage, especially in the first 3-15 min. The effect of the field

Card 1/2

ACCESSION NR: AT4042419

depends largely on the properties of the resin and the concentration of the solution. Regeneration of the AN-I resin by 5% Na_2CO_3 was accelerated almost 3.3 fold by ultrasound. Orig. art. has: 3 figures.

ASSOCIATION: Institut khimicheskikh nauk AN KazSSR (Institute of Chemical Sciences, AN KazSSR); Kazgipropishcheprom

SUBMITTED: 13Nov63 ENCL: 00

SUB CODE: GC NO REF SOV: 001 OTHER: 007

Card 2/2

ZYKOVA, V.V.; VITTIKH, M.V.; MAREYEVA, L.D.

Synthesis of anionic exchange resins based on polyallylamine and polyepoxide compounds. Report No.2: Effect of the separate factors of anionite synthesis on thermal stability in aqueous media. Trudy Inst. khim. nauk AN Kazakh. SSR 11:89-94 '64. (MIRA 17:11)

L 21337-65 [illegible] Pc-4/Pr-4/Ps-4/Pt-10

ACCESSION NR: [illegible]

AUTHOR: Zykova, V. V.; Vittikh, M. V.; Mareyeva, L. D.

TITLE: Synthesis of anion exchange resins from [illegible]amine and polyepoxy compounds [illegible] thermal stability of anion ex[illegible]

SOURCE: AN KazSSR. Institut khimicheskikh nauk. Trudy, v. 11, 1964. Sintez i issledovaniye vysokomolekulyarnykh soyedineniy (Synthesis and research of high-molecular compounds), 89-94

TOPIC TAGS: ion exchange resin, [illegible]amine resin, epoxide resin, thermal stability, [illegible]

[illegible] exchange resin An-a [illegible] AT [illegible]

and oxidizability before and after [illegible] hrs. heating [illegible] at [illegible]. The resins were shown [illegible] exposure [illegible] stations. [illegible]

Card 1/2

L 21339-65

ACCESSION NR: AT5001008

have a much better stability than the commercial Soviet anion-exchange resins EDE-10P and AN-2F, although in some respects stability varied significantly with the feed ratio used for preparation of the resin. Optimal properties were obtained at the weight ratio 10:4:2:15 for polyallylamine: epichlorohydrin: diglycidol ether:water. Diglycidol ether was prepared by a published method (Brit. Patent 518,571,1938). The ion-exchange capacity of the experimental resins increased by 0.7-5.9% after thermal treatment [illegible] 3 tables, 4 figures and 4 [illegible]

ASSOCIATION: Institut khimicheskikh nauk. Akademiya nauk Kazakhskoy SSR (Institute of Chemical Sciences, Academy of Sciences of the Kazakh SSR)

SUBMITTED: 00 ENCL: 00 SUB CODE: MT

NO REF SOV: 005 OTHER: 005

Card 2/2

L 28501-66 EWT(d)
ACC NR: AP6007541 SOURCE CODE: UR/0410/65/000/006/0103/0109

39
B

AUTHOR: Vittikh, V. A. (Novosibirsk)

ORG: none

TITLE: Investigation of noise rejection in some adaptive digitizers of measuring signals

SOURCE: Avtometriya, no. 6, 1965, 103-109

TOPIC TAGS: electric measurement, digitizer, noise rejection, signal analysis, random noise signal, electronic circuit

ABSTRACT: As noise rejection often determines the type of equipment for compressing measuring information, this article investigates the noise rejection of various algorithms used for adaptive digitizing. In a Legendre-type adaptive digitizer (see figure), signal f(t) at time t = 0 is fixed in a storage element SE and then applied to integrator I_1; the output is applied to I_2, and so on. The

UDC: 62-506?

Card 1/3

L 28501-66
ACC NR: AP6007541

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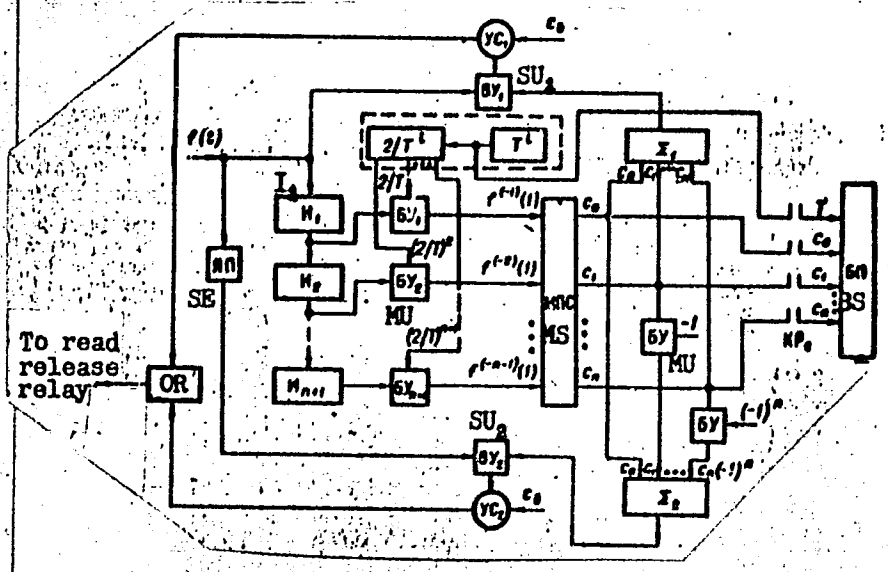


integrated values are multiplied, in units MU, by 2/T, $(2/T)^2$, etc., produced by a function generator (dotted line). Matrix scaler MS multiplies the above products by a known numerical matrix. Subtracting units SU_1 and SU_2 compute approximation errors; BS – buffer storage. This functional scheme can be realized by either

Card 2/3

analog or digital computer, the second being preferable for practical reasons. A simplified version of the above scheme permits obtaining high compression ratios in the cases when the signals are accompanied by random Gaussian noise of a higher frequency. It is found that the noise rejection of adaptive-digitalizing algorithms based on orthogonal Legendre polynomials is higher than that of algorithms based on differentiation. Orig. art. has: 2 figures, 3 formulas, and 3 tables.

SUB CODE: 09 / SUBM DATE: 25May65 / ORIG REF: 004

VITTIKH, V.A. (Novosibirsk); GINZBURG, A.N. (Novosibirsk)

Optimal discretization of measurement signals. Avtometriia no.3: 26-33 '65. (MIRA 19:1)

1. Submitted Sept. 15, 1964.

L 11119-66

ACC NR: AP6002011 SOURCE CODE: UR/0288/65/000/003/0037/0041

AUTHOR: Vittikh, V. A.; Ginzburg, A. N.; Kulikovskiy, K. L. 14 B

ORG: Institute of Automatic and Electrometry, Siberian Branch, AN SSSR (Institut avtomatiki i elektrometrii Sibirskogo otdeleniya AN SSSR)

TITLE: Determining the maximum deflection angle of the moving component of an electrometer

SOURCE: AN SSSR. Sibirskoye otdeleniye. Izvestiya. Seriya tekhnicheskikh nauk, no. 3, 1965, 37-41

TOPIC TAGS: electrometer, electrometric amplifier

ABSTRACT: Sensitivity of an electrometric amplifier depends, among other things, on the maximum permissible angle θ of deflection of the moving component of the electrometer; hence, increasing the electrometer range may result in considerably higher output of the amplifier. Formulas are developed which permit determining θ_{max} from a specified nonlinearity of the torque-deflection angle ratio; the torque curve is approximated by Chebyshev polynomials. A 9-step computation procedure is suggested. Orig. art. has: 20 formulas.

SUB CODE: 09 / SUBM DATE: 23Mar65 / ORIG REF: 002 / OTH REF: 001

Card 1/1 HW UDC:621.317.745:621.317.723

VITTIKH, V.A. (Novosibirsk); GINZBURG, A.N. (Novosibirsk)

Algorithm for data collection control. Avtometriia no.4: 28-35 '65. (MIRA 18:9)

L 55007-65 EWT(d)/EWP(k)/EWP(h)/EWP(l) Pm-4/Pn-4 Pq-4/Pr-4
Pk-4/Pl-4 IJP(c) BB/GG
ACCESSION NR: AP5012336 UR/0288/65/000/001/0032/0037 b
681.142.323 B

AUTHOR: Vittikh, V. A.; Ginzburg, A. N.; Drobyshev, Yu. P.

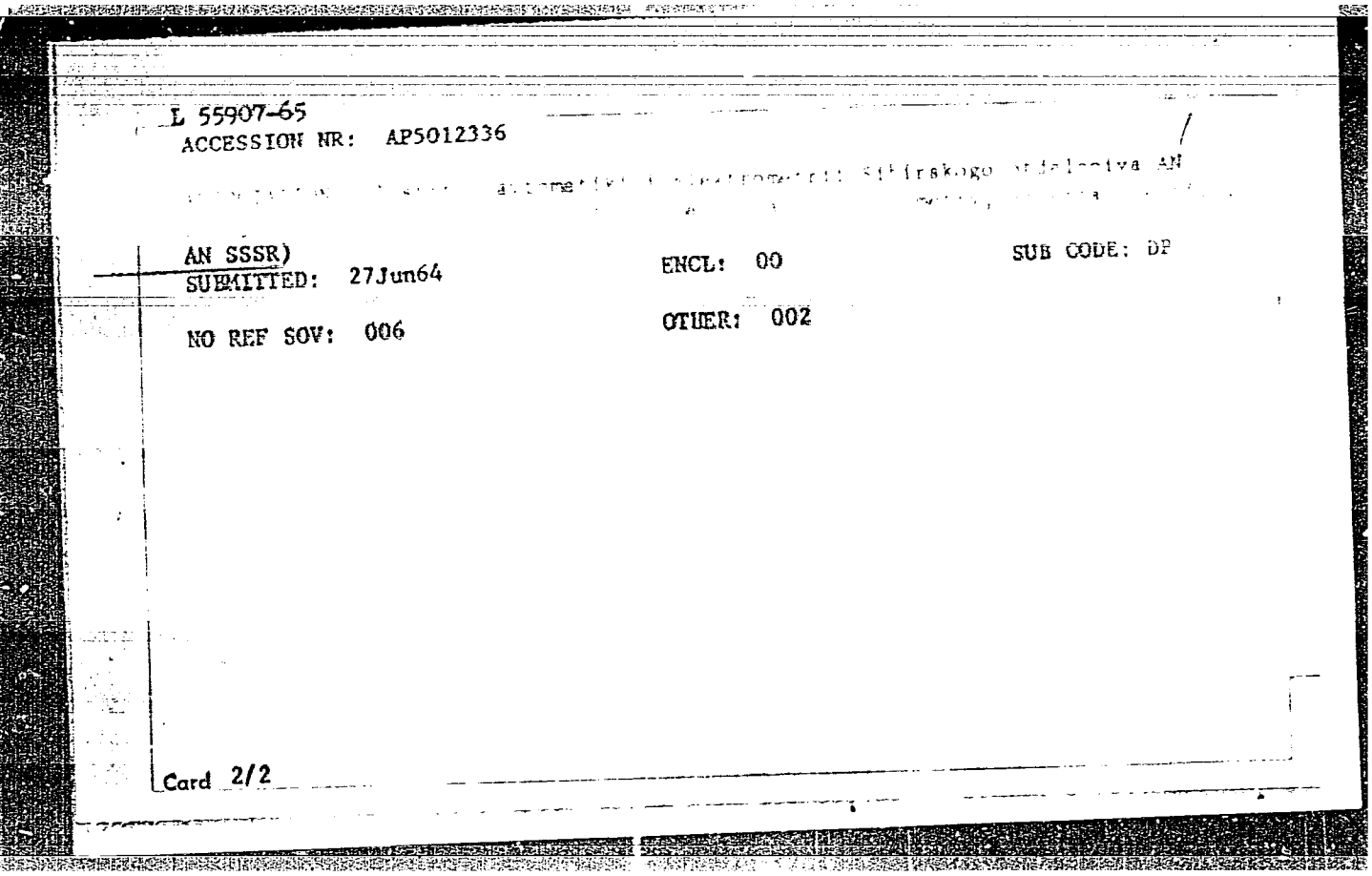
[illegible] the design of special computer devices reducing the excess

SOURCE: AN SSSR, Sibirskoye otdeleniye. Izvestiya. Seriya tekhnicheskikh nauk, [illegible]

TOPIC TAGS: compact data representation, Fourier coefficient evaluation, empirical function expansion, Chebyshev coefficient, computer input

ABSTRACT: The representation of information in compact form plays an important [illegible] of data into digital computers or its transfer [illegible] method for the integration of a function f(x) with a weight function $\rho(x) = 1/\sqrt{[illegible]}$ which permits a simple [illegible] of the Fourier-Chebyshev

Card 1/2



L 55907-65
ACCESSION NR: AP5012336

AN SSSR)
SUBMITTED: 27Jun64 ENCL: 00 SUB CODE: DP

NO REF SOV: 006 OTHER: 002

Card 2/2

VITTIKH, V.A.; GINZBURG, A.N.; KULIKOVSKIY, K.L.

Determining maximum angle of deflection of the movable part of an electrometer. Izv. SO AN SSSR no. 10. Ser. tekh. nauk no. 3:37-41 '65 (MIRA 19:1)

1. Institut avtomatiki i elektrometrii Sibirskogo otdeleniya AN SSSR, Novosibirsk. Submitted March 23, 1965.

L 47055-66 EWT(d)/FSS-2/EEC(k)-2/EWP(v)/T-2/EWP(k)/EWP(h)/EWP(l) WR

ACC NR: AP6015323 (N) SOURCE CODE: UR/0410/65/000/003/0026/0033

AUTHOR: Vittikh, V. A. (Novosibirsk); Ginzburg, A. N. (Novosibirsk)

ORG: none

TITLE: Optimal encoding of telemetry signals [Paper presented at the Sixth All-Union Conference on Automatic Control and Electric Measurement Methods held in Novosibirsk in September 1964]

SOURCE: Avtometriya, no. 3, 1965, 26-33

TOPIC TAGS: telemetry technique, error minimization, dynamic programming, signal coding, successive approximation method

ABSTRACT: Optimal encoding of fully known continuous signals, considered as determined functions of time, is discussed mathematically. The problem reduces itself to the minimization of some error functional, or to determining the minimal value of ε -entropy by successive approximation. Dynamic programming is deemed preferable to standard methods of classic analysis, even though it requires the employment of a universal digital computer. Orig. art. has: 23 formulas.

SUB CODE: 09,12/ SUBM DATE: 15Sep64/ ORIG REF: 004/ OTH REF: 008

Card 1/1 UCR UDC: 62-503

L 41159-66 EWT(d)/EEC(k)-2/EWP(1) IJP(c) GG/BB

ACC NR: AP6015382 (N) SOURCE CODE: UR/0410/65/000/004/0028/0035

AUTHOR: Vittikh, V. A. (Novosibirsk); Ginzburg, A. N. (Novosibirsk)

ORG: none

TITLE: One algorithm for the control of information collection

SOURCE: Avtometriya, no. 4, 1965, 28-35

TOPIC TAGS: algorithm, data acquisition, Legendre polynomial, automatic control design, analog digital converter

ABSTRACT: The authors consider an algorithm for the control of information collection from the source of a continuous signal. Based on the use of orthogonal Legendre polynomials and lacking any differentiation step, the algorithm possesses certain filtration properties due to a double integration of the signal with noise. The structural principle of adaptive discretizers based on the use of Legendre polynomials is analyzed, and it is shown that the error incurred in the uniform approximation of a signal by zero- and first-order orthogonal Legendre polynomials can be rather easily computed. By establishing the relation of this error to the linear integration error of the signal, a functional diagram of an information collection control device for use with this algorithm is presented. In essence, this device controls the time the

Card 1/2 UDC: 62-503

L 41159-66

ACC NR: AP6015382

test signal is connected to the analog-digital converter. The algorithm discussed for the control of information collection from a continuous signal source is an interpolation algorithm. Unlike well-known extrapolation algorithms, which are based on a prediction of signal properties from the value of the signal itself and its derivatives at a point t=0 and which are less flexible (since the approximation line does not undergo a parameter change as the time segment is increased) this algroithm makes it possible to obtain large compression factors. Moreover, using as it does orthogonal Legendre polynomials, this algorithm is superior to extrapolation algorithms in terms of its noise-suppression characteristic because it employs a double integration of the signal. Orig. art. has: 2 figures and 5 formulas.

SUB CODE: 05,12,09/ SUBM DATE: 10Apr65/ ORIG REF: 006

Card 2/2 hs

ACC NR: AT7004921 SOURCE CODE: UR/0000/66/000/000/0013/0019

AUTHOR: Vittikh, V. A. (Novosibirsk); Ginzburg, A. N. (Novosibirsk); Drobyshev, Yu. P. (Novosibirsk)

ORG: none

TITLE: Methods of measurement signals compression [Classification and review]

SOURCE: Vses. konf. po avtomatich. kontrol i metodam elektrich. izmereniy, 6th, 1964. Avtomatich. kontrol' i metody elektrich. izmereniy; tr. konf., t. I: Teoriya izmerit. info. sistem (Automatic control and electrical measuring techniques; transactions of the conference, v. 1: Theory of measuring information systems). Novosibirsk, Izd-vo Nauka, 1966, 13-19

TOPIC TAGS: measurement, information processing, data processing, ~~information compression~~ signal coding

ABSTRACT: Based on ten 1955-66 Soviet sources and one 1962 U.S. source, a classification diagram (see figure) is presented, and modern information-compression methods are reviewed. Compression of information by measuring signal statistics (H. Blasbalg et al., IRE Trans., no. 3, Sep 1962) is explained. Another group of methods (statistical coding) using signal statistics converts a sequence of messages at

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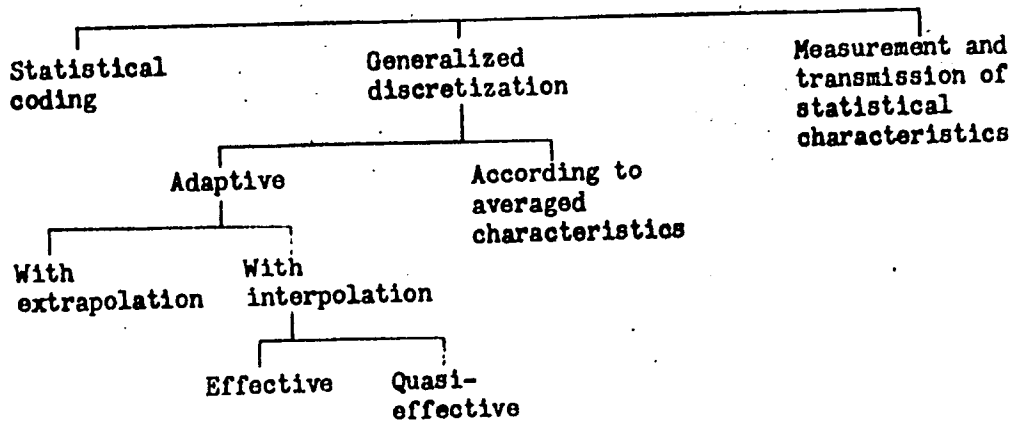
ACC NR: AT7004921

Measurement-information compression methods



the input into output binary signals. Unlike the preceding method, these methods preserve the sequence of events. In the predictive coding method, statistical redundancy is eliminated; only the difference signal (real value minus predicted value) is transmitted; the well-known delta-modulation method belongs with this group. The methods of general discretization are subdivided into two large groups: (1) Averaged-

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ACC NR: AT7004921

characteristic group in which the quantization interval is either selected from the maximum frequency of signal spectrum (Kotel'nikov's theorem) or is set under the correlation interval (continuous quasi-stationary signals with unlimited spectrum); in both cases, the quantization interval is constant; (2) Adaptive methods in which the quantization interval is variable; it depends on the present signal characteristic (e.g. its present derivative). The choice of compression method depends on the demands of the information recipient, viz., on the proximity criteria, complexity of materialization, permissible signal delay, etc. Methods of compression of signal connected with the reduction of its entropy seem promising; of these, most efficient are the methods of generalized adaptive discretization with extrapolation or interpolation of signals. Orig. art. has: 2 figures and 11 formulas.

SUB CODE: 09 / SUBM DATE: none / ORIG REF: 010 / OTH REF: 001

Card 3/3

ACC NR: AT7004922 SOURCE CODE: UR/0000/66/000/000/0020/0023

AUTHOR: Vittikh, V. A. (Novosibirsk); Ginzburg, A. N. (Novosibirsk); Drobyshev, Yu. P. (Novosibirsk)

ORG: none

TITLE: Method of discretization of measurement signals

SOURCE: Vses. konf. po avtomatich. kontrol i metodam elektrich. izmereniy, 6th, 1964. Avtomatich. kontrol' i metody elektrich. izmereniy; tr. konf., t. I: Teoriya izmerit. info. sistem (Automatic control and electrical measuring techniques; transactions of the conference, v. 1: Theory of measuring information systems). Novosibirsk, Izd-vo Nauka, 1966, 20-23

TOPIC TAGS: measurement, information processing, data processing, ~~information compression~~ signal element

ABSTRACT: Assuming that a certain delay in measurand transmission and a certain error are permissible, the following method of quantization and compression of measurement signals is suggested: The signal $f(t)$ is expanded into an orthogonal-function series within interval $a \leq t \leq b$, and only expansion coefficients are transmitted over the communication channel. Calculation of the first $n+1$ coefficients $c_0, c_1, \ldots, c_n$ is reduced to multiplying the vector $\vec{d} = [\varphi^{(-1)}(b), -\varphi^{(-2)}(b), \ldots, (-1)^n \varphi^{(-n-1)}(b)]$

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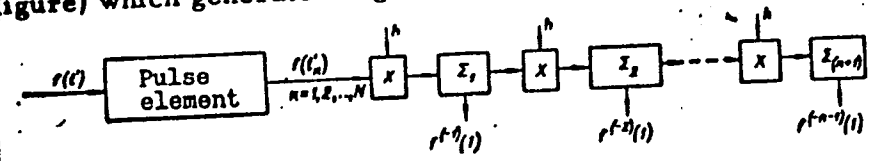
ACC NR: AT7004922

by the matrix $A = \begin{bmatrix} \hat{P}_0(b), 0, \ldots, 0 \\ \hat{P}_1(b), \hat{P}_1^{(1)}(b), \ldots, 0 \\ \ldots\ldots\ldots\ldots \\ \hat{P}_n(b), \hat{P}_n^{(1)}(b), \ldots, \hat{P}_n^{(n)}(b) \end{bmatrix}$ or $\begin{bmatrix} c_0 \\ c_1 \\ \vdots \\ c_n \end{bmatrix} = \vec{d} \cdot A$. Here, A remains constant and $\vec{d}$ depends on f(t); hence, it is sufficient to transmit components of $\vec{d}$ which are the results of successive integrations of f(t) or a modified function $f(t')$. The latter is applied to a pulse element (see figure) which generates regular pulses corresponding to the function values and sends them to multiplying unit x which multiplies them by the integration interval h. A series of summators prepares final signals. The system can be further simplified in the cases where multiplying-by-h operations can be performed at the receiving end. The method is offered for telemetry systems, particularly for the cases where the automatic processing at the transmitting end must be simple. Orig. art. has: 2 figures and 13 formulas.



SUB CODE: 09 / SUBM DATE: none / ORIG REF: 006

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24.4300 also 1327

32460
S/044/61/000/010/024/051
C111/C222

AUTHOR: Vitting, G.

TITLE: On the instable form of boundary layer equations of Prandtl

PERIODICAL: Referativnyy zhurnal. Matematika, no. 10, 1961, 53, abstract 10 B 240. ("Probl. pogranich. sloya i vopr. teploperedachi" M.L., Gosenergoizdat, 1960, 284-292)

TEXT: For the solution $u(x,y)$, $v(x,y)$ of the boundary layer equations in the form of Prandtl the author considers small perturbations of the velocity vector $\xi(x,y)$, $\eta(x,y)$:

$$\xi = Ce^{\alpha x + i\vartheta y}, \quad \eta = De^{\beta x + i\gamma\vartheta} \quad (\vartheta, \gamma \text{ --real})$$

It is stated that in those points where $u \geqslant 0$ and $uu_x + vu_y > 0$ the small perturbations fade in the direction of the flow (Re α , $\beta < 0$). The author discusses the question on the limit of the set of those points, i.e. the question of the limit of stability of the equations. The author considers the application of several variants of the difference method for a numerical integration of the boundary layer equations. It is

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On the instable form of boundary ... C111/C222

remarked that a numerically stable approximation of the difference method is realizable only outside a narrow wall zone of the flow in the above mentioned region of stability of the equations.

Reviewer's remark : The translations of the preceding three reviewed papers contain many misprints and terminological errors by which it is very difficult to understand the contents.

[Abstracter's note : Complete translation.]

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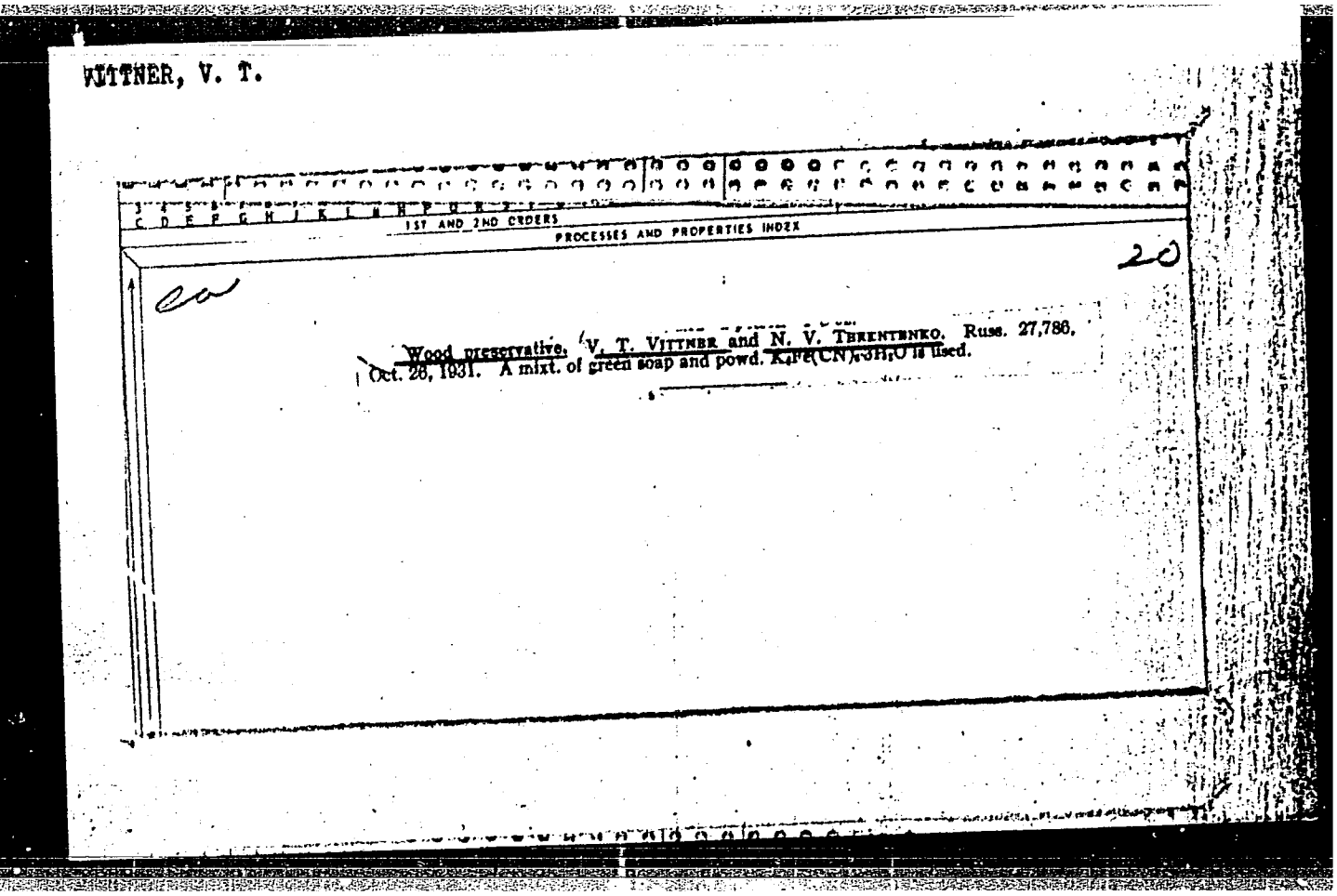
3

X12. Yiltsup E B. The displacements of points in an elastic



VITTNER, V. T.

1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

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Wood preservative. V. T. VITTNER and N. V. TERENTENKO. Russ. 27,786, Oct. 28, 1931. A mixt. of green soap and powd. $K_4Fe(CN)_6 \cdot 3H_2O$ is used.

VITTORF, K.N., Cand Med Sci --(diss) "Latent [redacted] forms of cardiac disturbances and methods of their correction." Len, 195[illegible]. 18 pp (Len State Order of Lenin Inst for the Adv med Training of Physicians im S.M.Kirov), 200 copies (KL,46-58, 112)