DOSHCHECHKIN, V.G., inzhener-podpolkovnik

Equipment familiarization exercises. Vest. protivovozd. obor. no.11:19-21 N '61. (MIRA 16:10)

(Artillery)

[illegible], [illegible]; [illegible], N.M.

Radiation necrosis of the brain; observation in practice. Med. rad. 10 no.7:72-75 Jl '65. (MIRA 18:9)

1. Radiologicheskoye otdeleniye (zav. - doktor med. nauk A.K. Gus'kova) kliniki Instituta gigiyeny truda i profzabolevaniy AMN SSSR, Moskva.

BAYSOGOLOV, G.D.; DOSHCHENKO, V.N.; CHIZH, A.S.

Case of successful treatment with sarcolysin of a patient with myeloma. Probl.gemat.i perel.krovi no.8:51-54 '61.
(MIRA 14:9)

(ALANINE) (MARROW--TUMORS)

KIRYUSHKIN, V.I.; DOSHCHENKO, V.N.; PODGORODETSKAYA, V.N.; [illegible], E.B.

Clinical manifestations in single exposure of the human organism to Cs^{137}. Med. rad. 8 no.11:33-40 N '63. (MIRA 17:12)

SOV/124-58-7-7983

Translation from: Referativnyy zhurnal, Mekhanika, 1958, Nr 7, p 98 (USSR)

AUTHOR: Doshchinskiy, G.A.

TITLE: The Theory of the Stress Distribution at the Elastic Limit (Teoriya predel'nogo uprugogo sostoyaniya)

PERIODICAL: Izv. Tomskogo politekhn. in-ta, 1957, Vol 85, pp 343-354

ABSTRACT: To represent the stress distribution at the elastic limit of isotropic materials it is proposed that the maximum value of the mean square of their principal relative elongations be adopted. From Hooke's law the elastic limit is represented by the first two invariants of the stress tensor, and it is found that what the author proposes constitutes a certain generalization of what is already known with respect to elastic limits, and that existing experimental data support his proposal.

L.A. Tolokonnikov

1. Materials--Stresses 2. Materials--Elasticity
3. Stress analysis--Theory

Card 1/1 ASSOCIATION — PREDSTAVLENO NAUCHNYM [redacted] KAFEDRY SOPROTIV— LENIYA MATERIALOV TOMSKOGO POLITEKHNICHESKOGO INSTITUTA

SOV/124-58-10-11490

Translation from: Referativnyy zhurnal, Mekhanika, 1958 Nr 10, p 113 (USSR)

AUTHOR: Doshchinskiy, G. A.

TITLE: A Contribution to the Theory of Elastic-plastic Strain (K teorii uprugo-plasticheskoy deformatsii)

PERIODICAL: Tr. Tomskogo politekhn. in-ta, 1957, Vol 85, pp 355-365

ABSTRACT: In order to develop equations relating the components of stresses and strains in a case of simple load, it is proposed that use be made not only of the generalized stress-strain relationship, as taken, for example, from tension experiments of cylindrical specimens, but that a new independent characteristic be introduced - a coefficient of transverse strain $\mu = \mu(\varepsilon)$, to serve as a function of the degree of strain. Under these conditions, the coefficient of volumetric strain will also depend upon the degree of strain, and the mean stress will not be proportional to the volumetric expansion. Be it noted that when $\mu = 1/2$, the condition of simple loading is not fulfilled.

V. V. Moskvitin

Card 1/1

ASSOCIATION — PREDSTAVLENO NAUCHNYM SEMINAREM KAFEDRY SOPROTIVLENIYA MATERIALOV TOMSKOGO POLITEKHNICHESKOGO INSTITUTA.

PHASE I BOOK EXPLOITATION SOV/3822

Doshchinskiy, G.A., Senior Instructor

K osnovam teorii uprugo-plasticheskoy deformatsii; avtoreferat dissertatsii na soiskaniye uchenoy stepeni kandidata tekhnicheskikh nauk (The Fundamentals of the Theory of Elastoplastic Deformation; Author's Abstract of a Dissertation for the Degree of Candidate of Technical Sciences) Tomsk, 1959. 14 p. 150 copies printed.

Sponsoring Agency: Tomsk. Politekhnicheskiy institut imeni S.M. Kirova. Kafedra soprotivleniya materialov.

No contributors mentioned.

PURPOSE: The abstract is of interest to mechanical engineers seeking advanced information on the theories of plasticity and elasticity of materials and stress-strain relations.

Card 1/2

The Fundamentals of the Theory (Cont.) SOV/3822

COVERAGE: The author presents a theory on elastoplastic deformations based on the indivisible analysis of the interdependence of stress tensors and strains. The validity of the theory has been verified by experiments. It explains some phenomena not explained before by the theory of small elastoplastic deformations. It also reveals some additional reserves of strength in materials under stresses. The author describes the geometric aspects of elastoplastic deformations and demonstrates that the principle of elastoplastic deformation may be considered as a necessary condition of the minimum of work in the process of deformation. No personalities are mentioned. There are no references.

TABLE OF CONTENTS: None given

AVAILABLE: Library of Congress (TG265.D6)

AC/pw/mas
7-19-60

Card 2/2

DOSHIMOV, U.: Master Agric Sci (diss) -- "Moniliasis of fruit crops in Central Asia". Leningrad, 1958. 18 pp (All-Union Order of Lenin Acad Agric Sci im V. I. Lenin, All-Union Sci Res Inst of Plant Protection), 150 copies (Kl., No 6, 1959, 138)

DOSHIMOV, U.

Effect of climatic conditions of Central Asia on the development of monilia scald in apricot. Trudy VIZR no.11:144-151 '58.
(MIRA 12:1)

(Soviet Central Asia--Apricot--Diseases and pests)

22 (1) SOV/27-59-2-25/30

AUTHOR: Doshkevich, S., Master-Craftsman of Industrial Training

TITLE: By One's Efforts (Svoimi silami)

PERIODICAL: Professional'no-tekhnicheskoye obrazovaniye, 1959, Nr 2, p 32 (USSR)

ABSTRACT: The author lists the help given to neighboring kolkhozes by the Tekhnicheskoye uchilishche Nr 6)Technical School Nr 6) in Baranovichi. Among other things, the students equipped the kolkholz "Molodaya gvardiya", Baranovichi Rayon, with electricity, installed engine DT-54 with a generator of 45 kva capacity, wired the apartment houses of kolkhozniks and a number of public buildings. In connection with the recent law on reorganizing the schools, the teaching staff is trying to link more closely theoretical and practical training.

Card 1/1

DOSHKEVICH, S.

Through forests and swamps. Prof.-tekh.obr. 17 no.2:20 F '60. (MIRA 13:6)

1. Master proizvodstvennogo obucheniya gruppy No.58 tekhnicheskogo uchilishcha No.6, Baranovichi.
(Baranovichi—Education, Cooperative)

U

USSR/General Problems of Pathology. Immunity.

Abs Jour: Ref Zhur-Biol., No 8, 1958, 37042.

Author : Dmukhadze, A.P., Dzeiranishvili, V.V., Dosichev, A.I.
Inst :
Title : The Role of the Conditional Reflex in the Process of Hyperimmunization.

Orig Pub: Bul. nauchno-techn. inform. Gruz. n.-i in-ta zhivotnovodstva i vet., 1957, No 1, 8-11.

Abstract: Bulls producing hyperimmune serum against pasterollosis of cattle were divided after 6 months of exploitation into 3 groups; I) Receiving antigen, II) Submitted to conditional reflex stimulation, III) Control. Oxen of the first 2 groups maintained hyperimmunity for a period of 1 year. It was sufficient to inject the oxen of the

Card : 1/2

36493

S/186/62/004/002/008/010
E075/E136

21,500

AUTHORS: Vol'khin, V.V., Shtol'ts, A.K., and Dosik, E.M.

TITLE: Treatment of liquid laboratory wastes containing some radioactive isotopes

PERIODICAL: Radiokhimiya, v.4, no.2, 1962, 220-226

TEXT: The object of the work was to investigate the factors that could decrease the volume of calcium phosphate used for coprecipitation of radioactive isotopes during its freezing, and to discover the most favourable conditions for this process. It was also aimed to apply the phosphate coagulation treatment simultaneously with the freezing of the obtained coagulate, for the purification of radioactive wastes. It was found that the main factor influencing the freezing effect is the composition of the liquid coagulant. The higher the concentration of electrolyte in solution, the less the changes in volume of the precipitate on solidification and melting. The maximum decrease in the volume of precipitate (about 20-fold) during the freezing is observed in the absence of electrolytes. It was shown that

Card 1/2

the freezing can be applied successfully to decrease the volume of the wastes, obtained after phosphate purification of radioactive laboratory effluents. The isotopes ^{45}Ca, ^{65}Zn, ^{89}Sr, ^{90}Sr, ^{90}Y, ^{91}Y and ^{144}Ce sorbed by calcium phosphates are not desorbed during the freezing. On dehydration of the solidified and molten precipitate an additional decrease of its volume was observed, which was not less than 30%. The total decrease in the precipitate volume obtained after phosphate coagulation of the liquid wastes with a low salt content was more than tenfold.
There are 2 figures and 1 table.

SUBMITTED: November 15, 1960

Card 2/2

MATVEYEVA, F.A.; DOSIK, M.M.

Thermal study of easily liquefiable clays of some Siberian deposits. Trudy Khim.-met.inst.Sib.otd.AN SSSR no.17:61-75 '61. (MIRA 15:8)

(Siberia--Clay--Analysis)

L 45152-65 EPF(n)-2/EPA(s)-2/EPA(w)-2/EWT(m)/EWP(1)/EWP(b)/T/EWP(e) Pt-7/Pu-4/Pab-10
WH/GS

ACCESSION NR: AT5008125 S/0000/64/000/000/0101/0112

AUTHOR: Matveyeva, F. A.; Dosik, M. M. 41 B+1

TITLE: Influence of titanium dioxide on the sintering of kaolinite

SOURCE: AN SSSR. Sibirskoye otdeleniye. Khimiko-metallurgicheskiy institut. Alyumosilikatnoye ogneupornoye syr'ye Kuzbassa (Aluminosilicate refractory raw materials of the Kuzbass). Novosibirsk, Redizdat Sib. Otd. AN SSSR, 1964, 101-112

TOPIC TAGS: titanium dioxide, kaolinite, mullite, alumina, refractory

ABSTRACT: The article discusses the effect of heating and titanium dioxide admixtures on the physical properties and phase composition of kaolinite. Chemical, thermal, electron-microscopic, x-ray diffraction, and petrographic methods were used. Titanium dioxide was found to decrease the refractoriness or temperature of pyrometric viscosity of kaolinite; a 10% admixture of TiO_2 decreased this temperature by 70°C. TiO_2 in amounts from 0 to 10% reduces the thermal effects of the heating curve for kaolinite. With an increase in TiO_2 content, the degree of sintering increases; the phase composition undergoes little change, but the form and structure of the mullite crystals is altered: the acicular form is converted into

Card 1/2

L 46152-65

ACCESSION NR: AT5008125

a prismatic form. The experimental data indicate that when kaolinite containing a TiO_2 admixture is heated between 1300 and 1400°C, a ternary solid solution of mullite, alumina, and TiO_2 is formed. Further investigations are required in order to establish the optimum TiO_2 content of kaolinite for industrial applications. Orig. art. has: 11 figures and 3 tables.

ASSOCIATION: none

SUBMITTED: 00 ENCL: 00 SUB CODE: MT

NO REF SOV: 014 OTHER: 004

Card 2/2 CC

DOSIK, P., inzhener; SHAPIRO, G., inzhener.

Assembly and welding of welded metal spans. Avt.transp. 32 no.3: 19-22 Mr '54. (MLRA 7:8)
(Bridges--Construction)

DOSIK, P.M., inzhenor

New method of drying lumber. Sbor. mat. o nov. tekh. v stroi. 17 no.4:20-23 '55. (MLRA 8:6)
(Lumber--Drying)

LOJIF, V.

Removal of soil in the reclamtion of meadows.

P. 33. (ROLNICKE HLASY) Praha, Czechoslovakia. Vol. 11, no. 12, Dec. 1957

SO: Monthly Index of East European Accession (EEAI) LC, Vol. 7, No. 5, May 1958

DOSIN, G.D. [Dosyn, H.D.]

Volcanic tuffs in the Krosno sediments of the Ukrainian Carpathians. Geol. zhur. 24 no.2:63-67 '64 (MIRA 18:2)

1. L'vovskaya ekspeditsiya tresta "Kiyevgeologiya".

DOSIN, G.D. [Dosyn, H.D.]

Eocene copper mineralization in the Ukrainian Carpathians.
Geol. zhur. 25 no.2:102-103 '65. (MIRA 18:6)

1. L'vovskaya ekspeditsiya tresta "Kiyevgeologiya".

DOSIN, M.

Let's sit down in front of a televisor. Rab. i sial. 33 no.2:18-19 F '57. (MIRA 10:3)
(Minsk--Television--Transmitters and transmission)

EXCERPTA MEDICA Sec.8 Vol.11/4 Neuro.-Psychiatry Apr 58

Dosios, A

1749. PSYCHIC DISORDERS AFTER STREPTOMYCIN THERAPY - Tulburări psihice după tratamentul cu streptomicină - Dosios A., Sonnenreich C. and Meiu Gh. Clin. de Psihiat., I.M.F., București - NEUROL. PSIHIAT. NEUROCHIR. 1956, 1/3 (14-17)

Brief review of 3 clinical cases (a young woman aged 19 yr., a woman aged 33 yr. and a girl aged 18 yr.) which, after streptomycin therapy (dose 11-18 g.), presented syndromes of agitation of the catatonic type. All were cured by interruption of the antibiotic treatment and by simultaneous i.v. administration of glucose solution, hexamine and vitamin C. Small doses of insulin (10 U. daily) were also added.

Schachter - Marseilles (L, 8)

EXCERPTA MEDICA Sec.12 Vol.12/2 Ophthalmology Feb. 58

Dosios, A.

221. SELF-MUTILATION WITH ENUCLEATION OF THE RIGHT EYE AND RUPTURE OF THE INFERIOR EYELIDS OF BOTH EYES DURING ONEIRIC CONFUSION OF MIND IN AN OPHTHALMOPATHIC PATIENT. Automutilare cu enucleaţia globului ocular drept şi ruperea pleoapelor inferioare la ambii ochi în cursul unei confuzii mintale onirice la o oftalmopată. Dosios A., Belciugăteanu C., Neicu N., Rosin A. and Bosteanu G. Lucrare Efectuată, Inst. de Oftalmol., Clin. de Psihiat. I.M.F., Bucureşti. NEUROL. PSIHIAT. NEUROCHIR. 1957, 2/1 (37-39)

In the literature, only 6 cases of auto-extirpation of the eye-ball have been found. The case presented is all the more interesting as it refers to a patient who was suffering from a double ocular lesion: chronic glaucoma with degenerative retinopathy of the right eye and post-traumatic atrophy (caused by violence on the part of her husband) in the left eye. The self-mutilation took place in a state of mental confusion with zoopsia.

Copelman - Bucharest (VIII, 12)

DOSIOS, Andrei; ALEXANDRU, Sen; NEICU, Valentina

Cooperation of the physician with the psychologist in the activity of psychiatry (adults). Rev psihologie 9 no.1: 37-49 '63.

BOSKACH, A. G.

BOSKACH, A. G. "The fundamental stages of the development of the idea of the topography of sandy deserts", Trudy In-ta geografii (Akad. nauk SSSR), Issue 39, 1948, p. 223-47,- Bibliog: 73 items.

SO: U-3042, 11 March 53, (Letopis 'Zhurnal 'nykh Statey, No.7 1949).

DOSKACH, A. G.

"The Symposium No.9, 'Geographic Problems'," Is. Ak. Nauk SSSR, Ser. Geograf. i Geofiz., 13, No.4, 1949

TOSKACH, A. G.

35876 Geomorfologicheskiye nablyudeniya v rayone razvitiya bugrov bera. Trudy in-ta geografii (akad. nauk sssr), vyp. 43, 1949, c. 19-32--Bibliogr: 18 Nazv

SO: Letopis' Zhurnal'nykh Statey, No. 49, 1949

DOSKACH, A.G.

PA156T47

USSR/Hydrography - Erosion Mar/Apr 50
Literature

"On S. S. Sobolev's Book, 'Development of Erosion Processes in the European USSR and the Fight Against Them,'" A. G. Doskach, A. S. Kes', Inst of Geog, Acad Sci USSR, 10 pp

"Iz Ak Nauk SSSR, Ser Geograf i Geofiz" Vol XIV, No 2

Very critically reviews subject book, in which erosion process is considered mainly from geomorphological viewpoint. Even from this standpoint, erosion process as discussed by Sobolev is detached from basic geographical laws and

156T47

USSR/Hydrography - Erosion (Contd) Mar/Apr 50

historical geographical connections. Sobolev's general theoretical geomorphological constructions are simplified and based on methodologically incorrect concept of cyclic "self-stopping" of erosion processes.

156T47

DOBYNIN, A.G.

"The Participation of Soviet Geographers in the Work of the Stalin Plan for Transformation of Nature" Vopr Fiz Geograf 1951 pp183-187 U-1233

GRIGOR'YEV, A. A.; GERASIMOV, I. P.; DOSKACH, A. G.; KAMANIN, L. G.; KUNIN, V. N.; LAVRENKO, Ye. M.; MURZAYEV, E. M.; RIKHTER, G. D.; CHUBUKOV, A. N.; FORMOZOV, A. N. DOSKACH, A. G.

Problemy Fizicheskoy Geofrafii (Problems of Physical Geography), Vol. 16, Symposium, Moscow, 1951.

U-1483, 25 Sept 51

DOSKACH, A. G.

"Participation of Soviet Geographers in Works of the Stalin Plan of Transforming Nature," Problemy Fizicheskoy Geofrafii (Problems of Physical Geography), Vol. 16, Symposium, Moscow, 1951.

U-1483, 25 Sept 51

DOSKACH, A.G.

Geomorphological research in the valley of the Ural River. Trudy Inst.geog. 51:5-11 '52. (MLRA 7:11)
(Ural Valley--Physical geography) (Physical geography--Ural Valley)

DOSKACH, A.G.

Division of the Ural foothills into geomorphological districts. Trudy Inst.geog. no.58:5-26 '53. (MIRA 8:4)
(Ural Mountain region--Physical geography)

DOSKACH, A.G.; SKRYNNIKOVA, I.N.

Joint scientific meeting of the learned councils of the Institute of Geography and the Institute of Soils of the Academy of Sciences of the U.S.S.R., devoted to the 50th anniversary of the death of V.V.Dokuchaev. Izv.AN SSSR Ser.geog. no.2:88-90 Mr-Ap '54. (MLRA 7:5)
(Dokuchaev, Vasil Vasil'evich, 1846-1903)

DOSKACH, A.G.

Landlocked basins and rivers of the Volga-Ural interfluve. Trudy Inst. geog. no.62:69-96 '54. (MLRA 8:5)
(Volga Valley--Hydrology) (Ural Valley--Hydrology)

DOSKACH, A.G.

Some characteristics of the eroded relief in the Saratov trans-Volga region. Trudy Inst. geog. no.65:111-128 '55.
(MLRA 8:11)

(Saratov region--Physical geography)

BUYANOVSKIY, M.S.; DOSKACH, A.[illegible]; FRIDLAND, V.M.; ZAL'TSMAN, L.M., doktor sel'skokhoz'yaystvennykh nauk, redaktor; LARIN, I.V., zasluzhennyy deyatel' nauki, doktor sel'skokhoz'yastvennykh nauk, redaktor; MARKOV, V.Ya., redaktor; ALEKSEYEVA, T.V., tekhnicheskiy redaktor.

[Nature and agriculture of the Volga-Ural interfluve] Priroda i sel'skoe khoziaistvo Volgo-Ural'skogo mezhdurech'ia. Moskva, Izd-vo Akademii nauk SSSR, 1956. 228 p. (MLRA 9:6)

1.Institut geografii Akademii nauk SSSR (for Buyanovskiy, Doskach) 2.Pochvennyy institut imeni V.V.Dokuchayeva Akademii nauk SSSR (for Fridland).

(Caspian Sea region--Geography)

DOSKACH, A.G.

Origin of the relief of the Volga-Ural interfluve. Trudy Inst.geog. no.69:5-36 '56. (MLRA 9:12)
(Volga Valley--Physical geography) (Ural Valley--Physical geography)

D.

DOSKACH, A.O.; FEL'DMAN, Ya.I.

Some features of the natural conditions of fallow and virgin lands in Kustanay Steppe. Izv. AN SSSR. Ser. geog. no.4:60-68 Jl-Ag '57. (MIRA 11:1)

1. Institut geografii AN SSSR.
(Kustanay Province--Physical geography)

DOSKACH, A.G.; OLYUNIN, V.N.; FEDOROVICH, B.A.

"Problems in the geography of Kazakhstan, no.2." Reviewed by A.G. Doskach, V.N. Oliunin, B.A. Fedorovich. Izv. AN SSSR.Ser.geog. no.1:167-169 Ja-F '58. (MIRA 11:2)
(Kazakhstan--Geography)

DOSKACH, A.G.; IVANOVA, Ye.N.; YEROKHINA, A.A.

Problems of differentiating minor and medium topographic features. Pochvovedenie no.12:59-68 D '59.
(MIRA 13:4)

1. Pochvennyy institut im. V.V.Dokuchayeva Akademii nauk SSSR, i Institut geografii Akademii nauk SSSR.
(Topography)

PIOTROVSKIY, Vladimir Vladimirovich; POLOBINOV, N.S., prof., retsenzent; BOGOMOLOV, L.A., dotsent, retsenzent; GELLER, S.Yu., doktor geograf. nauk, retsenzent; BLAGOVOLIN, N.S., nauchnyy sotrudnik, retsenzent; BOGDANOVA, N.M., nauchnyy sotrudnik, retsenzent; DOSKACH, A.G., nauchnyy sotrudnik, retsenzent; ZHIVAGO, A.V., nauchnyy sotrudnik, retsenzent; RANTSMAN, Ye.Ya., nauchnyy sotrudnik, retsenzent; NIKOLAYEV, N.I., prof., retsenzent; DOBROVOL'SKIY, V.V., dotsent, retsenzent; VOSKRESENSKIY, S.S., red.; SHAMAROVA, T.A., red.izd-va; PREYS, N.M., tekhn.red.

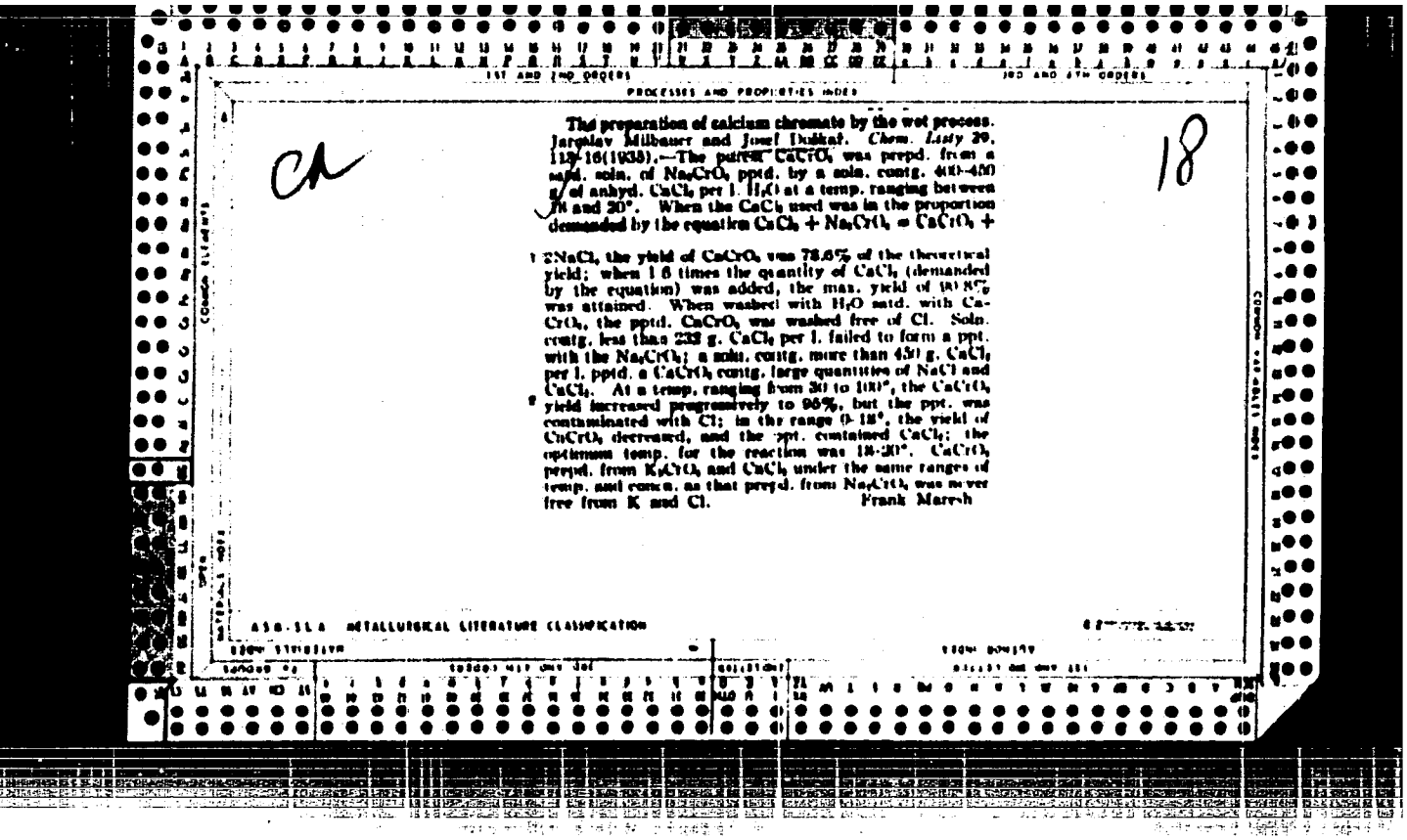
[Geomorphology and fundamentals of geology] Geomorfologiia s osnovami geologii. Riga, Izd-vo geodez.lit-ry, 1961. 283 p. (MIRA 14:12)

1. Nachal'nik otdela geomorfologii Instituta geografii AN SSSR (for Geller). 2. Otdel geomorfologii Instituta geografii AN SSSR (for Blagovolin, Bogdanova, Doskach, Zhivago, Rantsman).

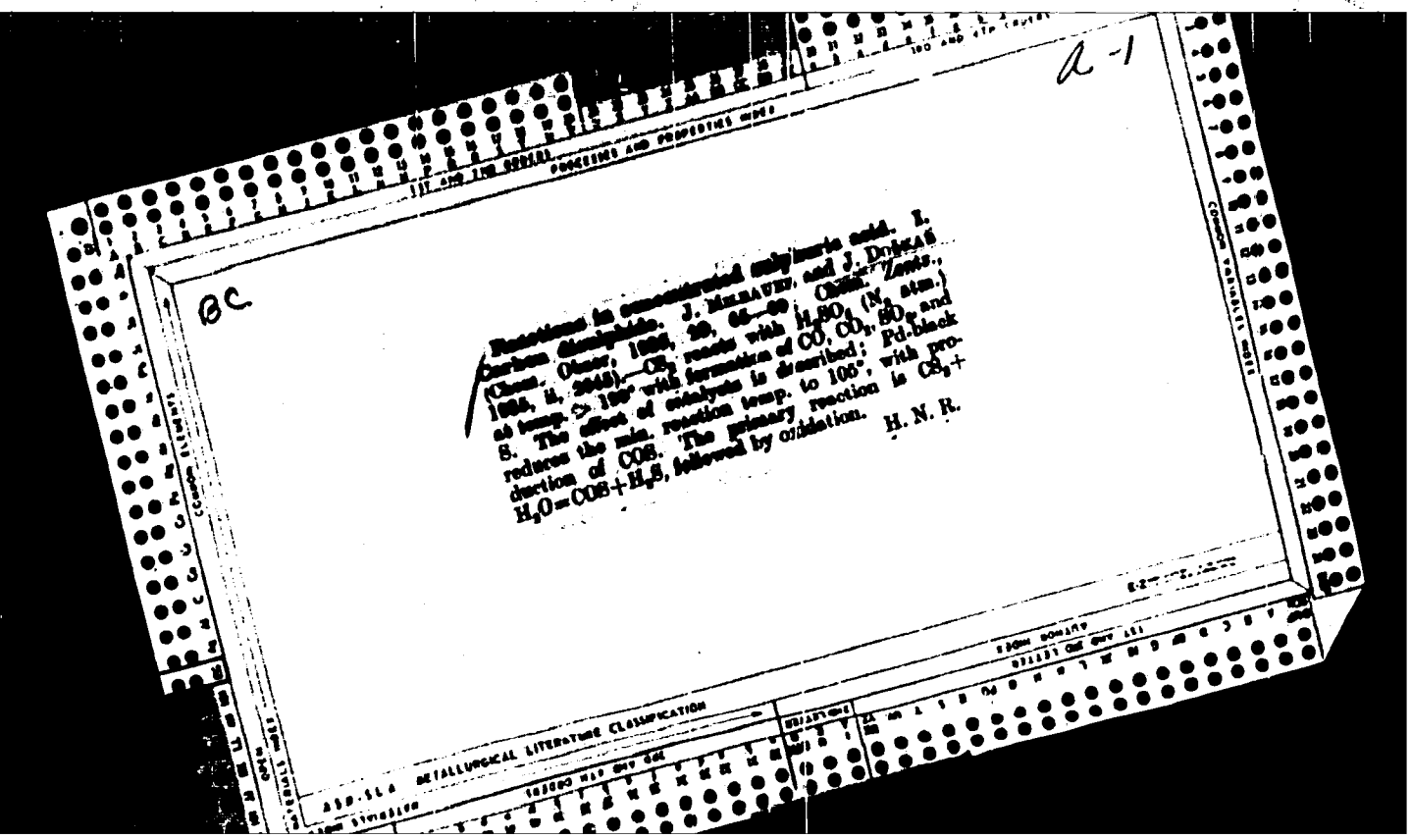
(Geomorphology) (Geology)

DOSKACH, A.G.

Earth science and the problems of altering nature. Izv. AN SSSR. Ser. geog. no.5:127-137 S-O '62. (MIRA 15:10)
(Earth) (Natural resources)



The preparation of calcium chromate by the wet process. Jaroslav Milbauer and Josef Dubkat. *Chem. Listy* 29, 112-16(1935).—The pure $CaCrO_4$ was prepd. from a satd. soln. of Na_2CrO_4 ppted. by a soln. contg. 400–450 g. of anhyd. $CaCl_2$ per l. H_2O at a temp. ranging between 18 and 20°. When the $CaCl_2$ used was in the proportion demanded by the equation $CaCl_2 + Na_2CrO_4 = CaCrO_4 + 2NaCl$, the yield of $CaCrO_4$ was 78.6% of the theoretical yield; when 1.6 times the quantity of $CaCl_2$ (demanded by the equation) was added, the max. yield of 80.8% was attained. When washed with H_2O satd. with $CaCrO_4$, the ppted. $CaCrO_4$ was washed free of Cl. Soln. contg. less than 233 g. $CaCl_2$ per l. failed to form a ppt. with the Na_2CrO_4; a soln. contg. more than 450 g. $CaCl_2$ per l. ppted. a $CaCrO_4$ contg. large quantities of NaCl and $CaCl_2$. At a temp. ranging from 30 to 100°, the $CaCrO_4$ yield increased progressively to 96%, but the ppt. was contaminated with Cl; in the range 0–18°, the yield of $CaCrO_4$ decreased, and the ppt. contained $CaCl_2$; the optimum temp. for the reaction was 18–20°. $CaCrO_4$ ppted. from K_2CrO_4 and $CaCl_2$ under the same ranges of temp. and concn. as that ppted. from Na_2CrO_4 was never free from K and Cl. Frank Marsh



PROCESSES AND PROPERTIES INDEX

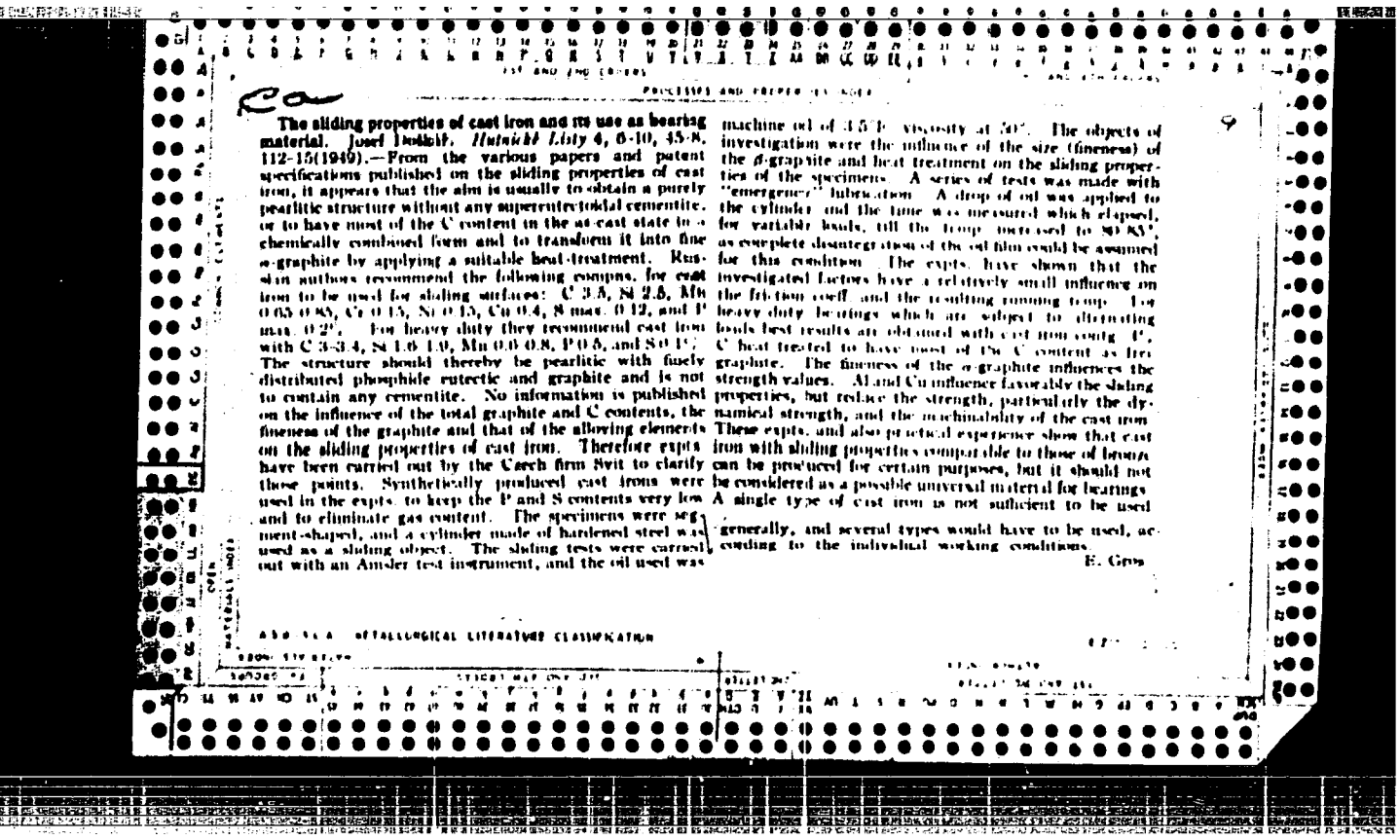
a-1

BC

Preparation of calcium chromate in the wet way. J. MILBAUER and J. DOLEŽAL (Sborn. Masaryk. Akad. Práce, 1934, 8, 45—50; Chem. Zentr., 1935, i, 3250; cf. B., 1933, 969).—Full details are given.

J. S. A.

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION



The sliding properties of cast iron and its use as bearing material. Josef Jedlička. *Hutnické Listy* 4, 6-10, 45-8, 112-15(1949).—From the various papers and patent specifications published on the sliding properties of cast iron, it appears that the aim is usually to obtain a purely pearlitic structure without any supereutectoidal cementite, or to have most of the C content in the as-cast state in a chemically combined form and to transform it into fine α-graphite by applying a suitable heat-treatment. Russian authors recommend the following compns. for cast iron to be used for sliding surfaces: C 3.5, Si 2.5, Mn 0.65-0.85, Cr 0.15, Ni 0.15, Cu 0.4, S max. 0.12, and P max. 0.2%. For heavy duty they recommend cast iron with C 3.3-3.4, Si 1.6-1.9, Mn 0.6-0.8, P 0.5, and S 0.1%. The structure should thereby be pearlitic with finely distributed phosphide eutectic and graphite and is not to contain any cementite. No information is published on the influence of the total graphite and C contents, the fineness of the graphite and that of the alloying elements on the sliding properties of cast iron. Therefore expts. have been carried out by the Czech firm Svit to clarify these points. Synthetically produced cast irons were used in the expts. to keep the P and S contents very low and to eliminate gas content. The specimens were segment-shaped, and a cylinder made of hardened steel was used as a sliding object. The sliding tests were carried out with an Amsler test instrument, and the oil used was machine oil of 4.5° E. viscosity at 50°. The objects of investigation were the influence of the size (fineness) of the α-graphite and heat treatment on the sliding properties of the specimens. A series of tests was made with "emergency" lubrication. A drop of oil was applied to the cylinder and the time was measured which elapsed, for variable loads, till the temp. increased to 80-85°, as complete disintegration of the oil film could be assumed for this condition. The expts. have shown that the investigated factors have a relatively small influence on the friction coeff. and the resulting running temp. For heavy duty bearings which are subject to alternating loads best results are obtained with cast iron contg. 4% C heat treated to have most of the C content as free graphite. The fineness of the α-graphite influences the strength values. Al and Cu influence favorably the sliding properties, but reduce the strength, particularly the dynamical strength, and the machinability of the cast iron. These expts. and also practical experience show that cast iron with sliding properties comparable to those of bronze can be produced for certain purposes, but it should not be considered as a possible universal material for bearings. A single type of cast iron is not sufficient to be used generally, and several types would have to be used, according to the individual working conditions.

E. Gros

S

PROCESSES AND PROPERTIES INDEX

10

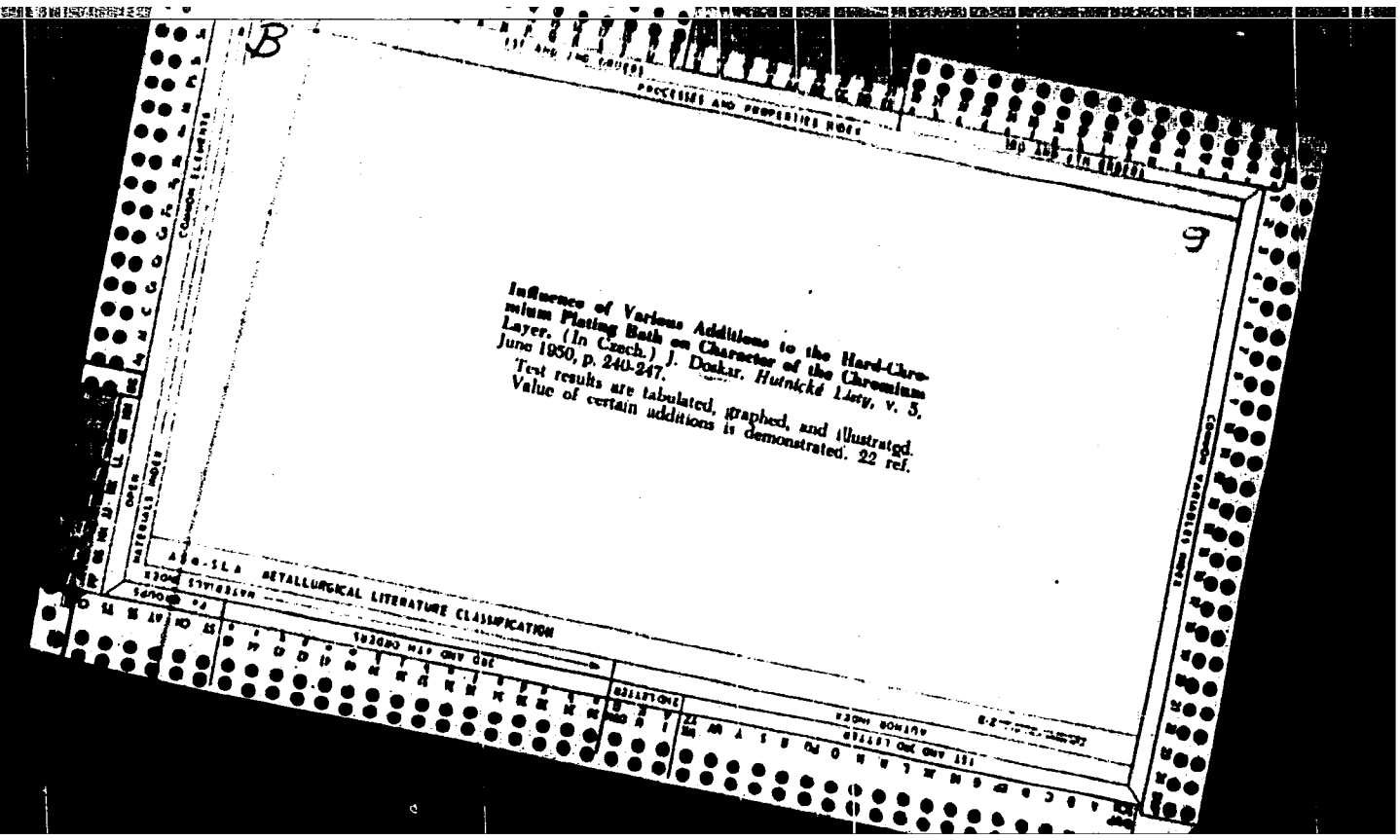
The Influence of Some Additions on the Carburization Rate of Steels by Charcoal. J. Dušbek. (Hutnické Listy, 1949, vol. 4, Nov., pp. 348-351; Dec., pp. 389-391). [In Czech]. A series of tests was carried out with various carburizing mixtures to find a suitable one which does not contain barium carbonate. Na_2CO_3 was dissolved in distilled water and the solution absorbed by charcoal which was then dried. It was found that mixtures containing 10, 5·5, and 1% Na_2CO_3 have a corrosive effect on the steel surface, and that there is practically no difference in the rate of carburization, and that a 3% Na_2CO_3 mixture gives uniform and equivalent carburization and has no corrosive effect on the parts. The specimens were all from one heat for each type of steel and the charcoal was a representative sample. The carburization tests were carried out in an electric furnace at 880° C. The carbon contents at depths increasing in stages of 0·1 mm., using sodium, potassium, and lithium carbonates with and without stabilisers, are given in tables. The tests showed that charcoal impregnated with barium compounds plus stabilisers made a very good carburizing compound, also that 5% of barium compound is sufficient when combined with sodium salts. A mixture of beryllium and sodium compounds is very effective, and a mixture of cobalt and sodium salts proved suitable for rapid carburizing.—R. G.

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

CA

4

Influence of various additions to a hard chromium bath on the characteristics of the chromium layer. J. Dubal. *Hutnické Listy* 8, 197-201, 210 (1953)(in Czech). To obtain information on the possibility of influencing the qualities of an electrodeposited hard Cr layer by various addns. to the bath extensive expts. with various org. and inorg. additions were carried out by the (Czech) Svit Works. The main emphasis was on the characteristics of practical importance, i.e. hardness, wear resistance, surface finish, scattering with the depth of the bath, and appearance of the transition layer steel to hard Cr. The test tank had a vol. of 8000 cc. and the operating temp. was thermostatically controlled. Hardness of the specimens was measured with a micrometric hardness tester (Zeiss) at a load of 50 g.; wear resistance was measured by observation of the traces of a widia disk after 2000 revolutions (instrument designed by Savina). Smoothness of the surface was measured by a suitably modified photocell brightness-measuring instrument combined with a microscope. The appearance of the transition layer steel to hard Cr was detd. by photomicrographs at a magnification of 48 times. Detailed data on these test conditions and test results are given. Microstructures are shown for inorg. addns. contg. active components as cations and as anions, for org. addns. and also for mixed addns. to the Cr baths. The results showed that for cations it is advantageous to use Co, Ce, and S uranyl salts. Numerous addns. to the sulfate electrolyte have a favorable influence on the properties of the hard Cr layer. F. Gros



Influence of Various Additions to the Hard-Chromium Plating Bath on Character of the Chromium Layer. (In Czech.) J. Doslar. *Hutnické Listy*, v. 5, June 1950, p. 240-247.

Test results are tabulated, graphed, and illustrated. Value of certain additions is demonstrated. 22 ref.

Doskar, J.

Title: Fundamentals of Galvanization Technique.

Author: Doskar, J.

1953, 277 p.

Publishers: Praha, Statni Nakl. Technicke Literatury

REAL, Vol 4, No. 3, March 1955

DOCKAR, J.

12916 Centrifugal Casting of Cutting Tools. J. Dockář. Henry Brutcher, Altadena, Calif., Translation no. 3280, 6 p. (From Slévárenství, v. 1, nos. 1-2, 1953, p. 28-30.)
Centrifugally cast milling cutters take the place of forged and machined units. Tables, photographs. 2 ref.

10-5-54

DOSKAR, J.

Journal of Applied Chemistry
April 1954
Industrial Inorganic Chemistry

Cutting tools cast by the centrifugal method. J. Doškář (*Slévárenství*, 1953, 1, No. 1/2, 28—30; *J. Iron Steel Inst.*, 1954, 176, 111).—The development of centrifugally cast cutting and grinding tools to replace forged high-speed tools, is discussed, and results obtained by experiments and in actual practice are given. Fine-grained low alloy steels of the ledeburitic eutectoid type, cast into specially developed ceramic moulds, have the same life, impact strength, and other properties as the conventionally made tools.

R. B. CLARKE.

DOSKAR, J.

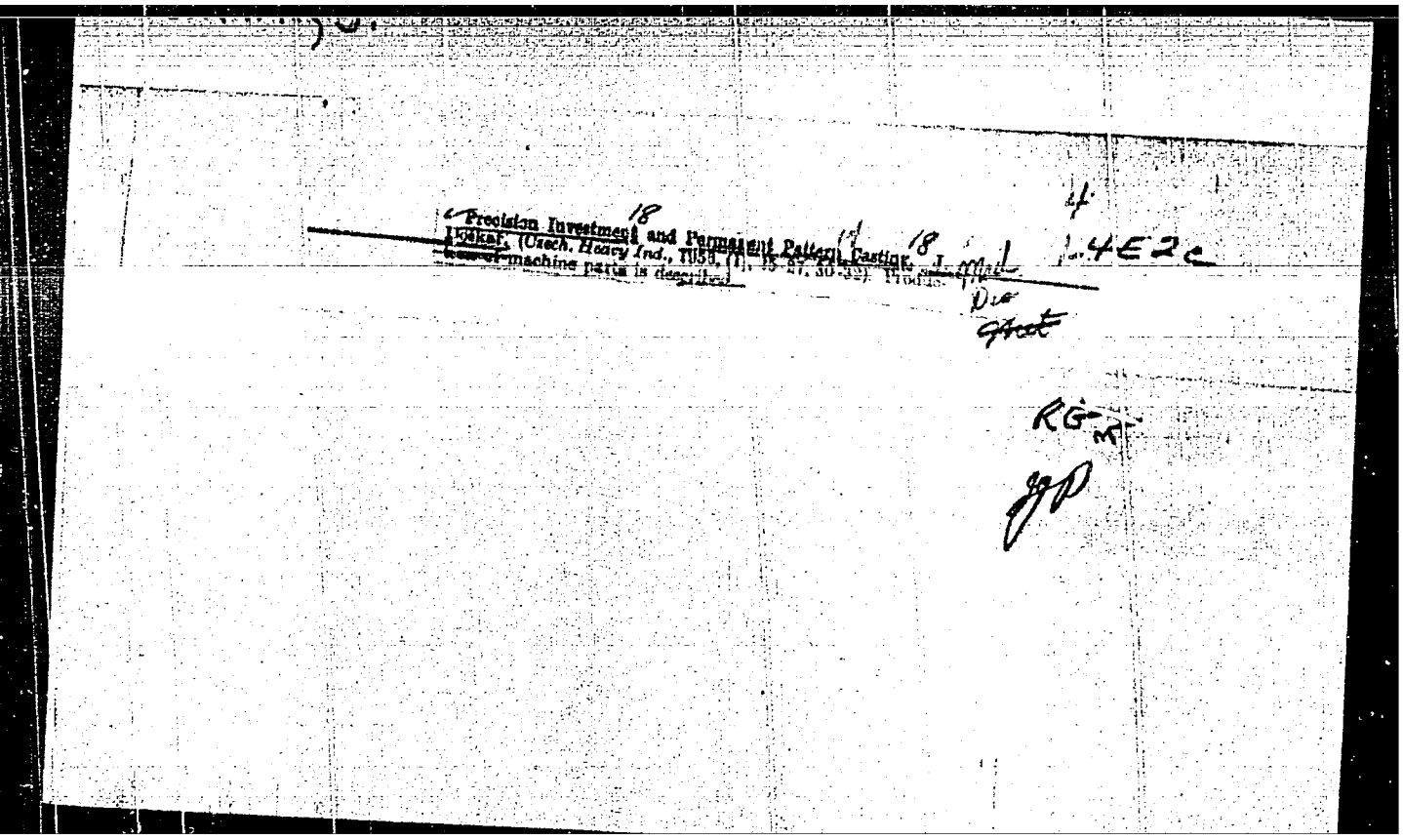
Effect of the structure of cast iron on its properties as a material for bearings. Prace, p. 113, SLEVARENSTVI (Ministerstvo strojirenstvi a Ministerstvo hutniho prumyslu a rudnych dolu) Praha, Vol. 3, No. 3, Mar. 1955

SOURCE: East European Accessions List (EEAL) Library of Congress, Vol. 5, No. 12, December 1956

DOCKAL, J.

Novodobe spusoby liti kovu. (vyd. 1.) Praha. Statni nakl. technicke literatury, 1955. 286 p. (Modern methods of metal casting. 1st ed. illus., bibl., notes)

So: Eastern European Accession Vol. 5 No. 4 April 1956



DOSKAR, J.

Precise casting by means of melting or permanent models.

p. 108 (Jemna Mechanik a Optika. Vol. 2 no. 4, Aug. 1957. Praha, Czechoslovakia)

Monthly Index of East European Accessions (EEAI) LC. Vol. 7, no. 2, February 1958

DOSKAR, J.

"Precision casting method employing permanent patterns and pulpy molding material with colloidal SiO_2." p. 77.

SLEVARENSTVI. (MINISTERSTVO TEZKEHO STROJIRENSTVI A CESKOSLOVENSKA VEDECKA TECHNICKA SPOLECNOST PRO HUTNICTVI A SLEVARENSTVI). Praha, Czechoslovakia, Vol. 7, no. 2, Feb. 1959.

Monthly List of East European Accessions (EEAI), LC, Vol. 8, No. 9, September 1959. Uncl.

DOSKA J.

Changes in technology of precision casting using the lost-wax method. p. 47

STROJIRENSTVI (Ministerstvo tezkeho strojirenstvi, Ministerstvo presneho strojirenstvi a Ministerstvo automobiloveho prumyslu a zemedelskych stroju)
Praha, Czechoslovakia
Vol. 9, no. 1, Jan 1959

Monthly list of East European Accessions (EEAI), LC, Vol. 8, No. 7.
July 1959
Unclassified

DOSHKARZH, I.[Doskar, Josef], inzh. doktor; VALIKHRAKH, O.[Valihrach, Otakar], inzh.; GABRIYEL', Ya.[Gabriel, Jan]; KASHTANEK, O. [Kastanek, Otakar]; ZHUKOV, A.A.[translator] EMINGER, Z., doktor nauk, retsenzent; POLYAKOV, Ya.G., red.; KRAUS, O., glav. red.; SIROTIN, A.I., red. izd-va; EL'KING, V.D., tekhn. red.

[Precision casting in ceramic molds]Tochnoe lit'e v keramicheskie formy. Pod red. IA.G.Poliakova. Moskva, Mashgiz, 1962. 295 p. (MIRA 16:2)

(Precision casting)

DOSKAR, J., inz., dr.

Designing machine parts for precision investment casting.
Strojirenstvi 12 no.10:723-726 10 0 '62.

1. Zavody presneho strojirenstvi, Gottwaldov.

DOSKAR, Zdenek, ing.

Sixth International Congress on Industrial Mineral Dressing.
Rudy 11 no.6:207-208 Je '63.

1. Ministerstvo hutniho prumyslu a rudnych dolu, Praha.

DOSKARAYEV, ZH.

USSR/ Miscellaneous

Card 1/1 Pub. 123 - 10/11

Authors : Doskarayev, Zh.

Title : Professional advice of Aral and Caspian Sea fishermen

Periodical : Vest. AN Kaz. SSR 2, 82 - 88, Feb 1955

Abstract : Report written in Kazakh dialect describes the personal experiences of Soviet fishermen operating along the shores of the Azal and Caspian Seas.

Institution: .....

Submitted: .....

L 1620-66

ACCESSION NR: AP5020836 UR/0020/65/163/004/0991/0993

AUTHOR: Agaverdiyev, A. Sh.; Doskoch, Ya. Ye.; Tarusov, B. N. 51 B

TITLE: Ultra-weak emission of plants with temperature reduction

SOURCE: AN SSSR. Doklady, v. 163, no. 4, 1965, 991-993

TOPIC TAGS: plant physiology, biophysics, low temperature effect, light emission, luminescence, anoxia, free radical

ABSTRACT: Emission intensity changes of plants at low temperatures were studied to obtain data on oxidative processes. Four day old wheat and barley sprouts of 50 different varieties were investigated in a thermostat at a temperature range of 20 to -10 C, and photoemission was measured by an end-window photomultiplier. Additional experiments were conducted to determine the effects of anoxia, nitrogen, and propylgallate on emission intensity. Findings show that emission intensity decreased with temperature reduction. Luminescence was recorded with temperatures reduced as low as 6 to 7 C for thermophylic varieties, and with temperatures reduced as low as 0°C for the more cold resistant varieties. With further reduction in

Card 1/3

L 1620-66
ACCESSION NR: AP5020836

temperature, emission flared up and established a new low temperature maximum. Then, when the temperature was raised, emission intensity increased more rapidly, probably due to low temperature destruction of the inhibitor mechanism. The position of the low temperature maximum of a given plant variety was related to its frost resistance. Luminescence ceased in plants subjected to anoxia, and no low temperature emission flare-up was observed until oxygen was admitted to the system. Propylgallate, a free radical inhibitor, reduced the intensity of the flare-up and shifted it to a lower temperature by about 2°. Ultra-weak emission appears to be a chemoluminescent process which accompanies the oxidation of structural lipids. This free radical oxidation is maintained at a low level by bioantioxidants. However, at certain critical points, the antioxidant equilibrium is disturbed. Then, when the temperature is raised, the expenditure of antioxidants exceeds their return flow and oxidative processes develop autocatalytically. Thus, the flare-up of ultra-weak emission appears to be caused by sharp increase in antioxidant consumption. Orig. art. has: 3 figures.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V.

Card 2/3

L 1620-66
ACCESSION NR: AP5020836

Lomonosova (Moscow State University)

SUBMITTED: 15Apr65 ENCL: 00 SUB CODE: LS

NR REF SOV: 004 OTHER: 000

Card 3/3

DOSKOCHILOVA, D. [Doskocilova, D.]; VONDRACHEK, M. [Vondracek, M.]

Micromethods for identifying and characterizing antibiotic substances from actinomycetes; identification of antibiotics by means of infrared spectra. Antibiotiki 6 no.8:738-751 Ag '61. (MIRA 15:6)

1. Nauchno-issledovatel'skiy institut antibiotikov, Roztoki u Pragi.
(ANTIBIOTICS) (SPECTRUM, INFRARED) (ACTINOMYCES)

DOSKOCIKOVA, D.; SCHNEIDER, B.; SEBENDA, J.

On the structure and properties of polyamides. Part 2: Determination of crystallinity in polycaprolactam blocks by infrared absorption. Coll Cz Chem 27 no.8:1760-1769 Ag '62

1. Institute of Macromolecular Chemistry, Czechoslovak Academy of Sciences, Prague.

AGAVERDIYEV, A.Sh.; DOSKOCH, Ya.Ye.; TARUSOV, B.N.

Effect of low temperatures on the extremely weak luminescence of plants. Biofizika 10 no.5:832-836 '65.

(MIRA 18:10)

1. Biologo-pochvennyy fakul'tet Moskovskogo gosudarstvennogo universiteta imeni M.V.Lomonosova.

HURKA, Karel, Dr., C.Sc.; (Vinicna 7, Praha 2); DOSKOCIL, Jaromir, Dr., C.Sc. (Vinicna 7, Praha 2)

Influence of relative atmospheric humidity on the survival of bat-fleas (Aphaniptera, Ischnopsyllidae). Cas entom 58 no.2:111-116 '61. (EEAI 10:9)

1. Department of Systematic Zoology, Faculty of Natural Sciences, Charles University, Praha.

(Fleas)

DOSKOCIL, Jaromir

A find of Neottiophilum praeustum in Bohemia. Cas entom 57 no.2: 193-194 '60. (EEAI 10:1)

1. Katedra Systematike zoologie prirodovedecke fakulty UK (University Karlovy, Prague)
(Czechoslovakia--Neottiophilum)

DOSKOCIL, Jaromir

Two-winged flies (group Acalyptrata) in the Rychlebske Hory Mountains. Prir cas slezsky 23 no.2:249-272 '62.

CA

The toxicity of buffer solutions. Jiří Lhoták. Spisy vydávané *Přírodovědeckou Fakultou Karlovy Univ.* (Acta Facultat. Rerum Nat. Univ. Carolinae) No. 185, 31 pp. (1948)(in English).—Three strains of *Spirogyra* and one of *Mougeotia* were observed as they grew in the buffer solns. and seeds of *Sinapis alba* as they germinated. In acid solns. the acetates are more toxic than phosphates, which show the greater toxicity in alk. solns. Citrates are more toxic than phosphates. Bufsturates have very low toxicity. The swelling and liquefying effect of basicity may be concealed in alk.-resistant spp. in concd. buffer solns. by the coagulation caused by the anions of the buffer. The addn. of nutrients to the solns. reduced the toxicity of the buffers. K. L. Given

CA

11A

Polarography. Jiri Dvořák(?). *Stud. Lékař. Zecheslov.* 11, 84-6(1950).—Polarographic studies on the action of tyrosinase show that whereas only one atom of O is needed to oxidize catechol into *o*-benzoquinone, a second atom is consumed, presumably by an oxidizable product liberated in aq. soln. from decompn. of benzoquinone. Oxidation mediated by tyrosinase proceeds by introduction of a hydroxy group in the ortho position to the original phenolic group; the resulting *o*-diphenol appears capable of reducing the bivalent Cu in the tyrosinase coenzyme, to univalent Cu, most of which promptly reverts to bivalent, but some of which bonds into a complex with the monophenol, which then becomes readily oxidizable by atm. O.

Jean Dufrenoy

CA

Polarography of some orthopolyphenols and their oxidation products. I. Doskočil (Charles Univ., Prague). *Collection Czechoslov. Chem. Communs.* 15, [illegible] (1950) (in English).—The *catechol-o-quinone* system was proved to be perfectly reversible at the dropping-Hg electrode. Its E_0, obtained by extrapolation to pH 0 of the linear relation between potential and pH over the range of pH 8 to 1, was E_0 = +0.810 v. An anodic wave, reported for this system by Vlček, *et al.* (C.A. 42, 7026b) could be traced to the phosphate buffer used. Similarly, the oxidation-reduction potential for *4-methyl-o-benzoquinone* was found to be E_0 = +0.754 v. The reduction of *β-naphthoquinone* and the oxidation of *1,2-dihydroxynaphthalene* are also reversible processes with half-wave potentials which, upon extrapolation to pH 0, give E_0 = +0.573 v. *Pyrogallol* is oxidized at the dropping-Hg electrode in two steps, the more neg. one showing a shift in half-wave potential of [illegible] per pH unit (extrapolation to pH 0 gives E_0 = [illegible]). In order to test the reversibility of this reaction, pyrogallol was oxidized by (1) $Ce(SO_4)_2$ at pH [illegible], (2) H_2O_2 and peroxidase at pH [illegible], (3) tyrosinase and atm. O_2 at pH 7.0, (4) atm. O_2 at pH [illegible]. Immediate and delayed polarograms of the oxidation products failed to reveal a reduction [illegible] However, application of the Kalousek technique (C.A. 42, 8071a) for the study of unstable primary oxidation products demonstrated that such a primary reversibly reducible oxidation product of pyrogallol exists. The final product of the electrooxidation is purpurogallin, and the probable mechanism of this oxidation is discussed. Otto H. Müller

1951

C. A.
1951

Organic Chemistry
11

The oxidation of hydroquinone with tyrosinase and air oxygen. J. Doskočil (Charles Univ., Prague). *Collection Czech. Chem. Communs.* 15, 614-20(1950)(in English).—Polarograms showed that no H_2O_2 was produced, even as a reaction intermediate, in the oxidation of *o*-$C_6H_4(OH)_2$ (I) by atm. O in the presence of tyrosinase (II). The O is reduced to H_2O. In the presence of I and II, hydroquinone (III) was oxidized by atm. O to *p*-quinone and hydroxyquinone (IV), and the reaction velocity of this system was proportional to the concns. of I and II, and almost independent of the III concn. The oxidation of III to 1,2,4-$C_6H_3(OH)_3$ (V) in the presence of II requires a trace of I. The V is then further oxidized to IV. Polarograms and a discussion of the II reaction are given. L. Rosen

Derivatives of safrole. I. The product from the Blanc-Quelet reaction with safrole. Nobutoshi Ichikawa and Ei-ichi Togashi (Shiono Kako Co., Osaka). *J. Chem. Soc. Japan, Pure Chem. Sect.*, 71, 508-600(1950).—Details are described in the preliminary report (*C.A.* 45, 6590h). Further, 10 g. 1-allyl-6-chloromethyl-3,4-methylenedioxybenzene (I) with 1.2 g. Na and 30 cc. MeOH, gave 1-allyl-6-methoxymethyl-3,4-methylenedioxybenzene, b_{15} 138-9°, d_4^{15} 1.125, n_D^{15} 1.5350. NaCN (5 g.) with 15 g. I in 40 cc. of C_6H_6-EtOH (10:15) gave 1-allyl-6-cyanomethyl-3,4-methylenedioxybenzene, b_5 147-9°, d_4^{15} 1.107, n_D^{15} 1.5314.

O. Simamura

J

DOSKOCIL, J.

(example: CO + 2 H_2 = MeOH; ... G. M. Kosolapoff ...
H_2O).

CA

4

A polarographic study of some reactions of *o*-quinone in aqueous solution. J. Doskočil (Charles Univ., Prague). *Collection Czechoslov. Chem. Communs.* 15, 780–90(1950) (in English).—The decompn. of *o*-quinone (I) in aq. soln. gives catechol and an unidentified oxidation product, which is neither 2-hydroxyquinone, purpurogallin, nor dihydroxyphenylhydroxy-*o*-quinone. The decompn. of I is catalyzed by catechol, and exptl. data on the rate of decompn. agree with the theoretical rate of a bimol. reaction between I and catechol at const. pH, but the rate const. varies as $[OH^-]^{1/2}$. The reaction is photocatalyzed. The mechanism of the decompn. of *o*-toluquinone (II) is similar, but the reaction is much slower, owing to hyperconjugation. The normal potential of the I-catechol couple is +0.810 v., whereas that of the corresponding *p*-quinone couple is +0.703 v. On reaction with glycine, substitution products are formed. E^0 for the I-glycine compd. is +0.521 v., and that for the compd. with *p*-quinone is +0.487 v. The oxidation of catechol by H_2O_2 or Ce(IV) gives a red substance reversibly reducible at the dropping electrode or by H on colloidal Pd. This is stable only above pH 7.6. Its properties differ from those of I or hydroxyquinone, and it is thought to be a peroxide-substituted quinone.

Louis Meites

DOSKOČIL, J. Czech CA: 47:11033

Charles Univ., Prague

"A polarographic study of some biological oxidation-reduction indicators."

Sborník Mezinárod. Polarog. Sjezdu Praze, 1st Congr. 1951, Pt. III, Proc., 645-7 (in Czech), 648-9 (in Russian), 649-50 (in English)

CA

Electrochemistry - 4

The polarographic reduction of hydrogen peroxide catalyzed by iron complexes of catechol, pyrogallol, and ascorbic acid. J. Doskočil (Charles Univ., Prague). *Sborník Mezinárod. Polarog. Sjezdu Praze, Int. Congr. 1951*, Pt. 1., *Prac.* 669–72(in Russian), 674–9(in English).—The violet complexes formed at pH 7.62 and 8.99 between ferrous or ferric salts and pyrogallol, or catechol, or ascorbic acid are polarographically reversible oxidation-reduction systems, with half-wave potentials of about −160 mv. *vs.* the normal H electrode. These complexes catalyze the polarographic reduction of H_2O_2. Two possible reaction mechanisms are discussed, and velocity consts. have been calcd. for these reactions. Otto H. Müller

DOSKOCIL, J.

24(2,4) PHASE I BOOK EXPLOITATION CZECH/2433

International Polarographic Congress. 1st, Prague, 1951

Sborník I. Mezinárodního polarografického sjezdu. Díl 3: Hlavní referaty přednesené na sjezdu. Proceedings...Vol 3: Reviews Read at the Congress. Praha, Přírodovědecké vyd-vo [1952] 774 p. 2,000 copies printed.

Resp. Ed.: Jiří Koryta, Doctor; Chief Ed. of Publishing House: Milan Skalník, Doctor; Tech. Ed.: Oldřich Dunka.

PURPOSE: The book is intended for chemists, chemical engineers, and physicists.

COVERAGE: The book is a collection of reviews and original papers read at the International Polarographic Congress held in Prague in 1951. Uses of polarography in organic and inorganic analysis, biochemistry, medicine, and industrial chemistry are discussed. In the section, Reviews Read at the Congress, Russian and other German or English translations of each review are presented. In the section, Original Papers Read at the Congress, only those translations in Russian, German, and English which have not been published in Volume I are presented. The following scientists participated in the opening of the Congress: Professor Viktor Kemula, Dean of the Faculty of Sciences, Warsaw; Doctor Jaromír Dolanský, Minister of Planning; Professor Jaroslav Horovský, Chairman of the Congress; and Professor Jaroslav Fukásko, Chairman of the Center for Scientific Research and Technical Development. References follow each paper.

Card 7/14

DOSKOCIL, J.

24(2,4) PHASE I BOOK EXPLOITATION CZECH/2433

International Polarographic Congress. 1st, Prague, 1951

Sborník I. Mezinárodního polarografického sjezdu. Díl 3: Hlavní referaty prednesene na sjezdu. Proceedings...Vol 3: Reviews Read at the Congress. Praha, Přírodovědecké vyd-ví [1952] 774 p. 2,000 copies printed.

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Santauy, P. Polarography of the Oxidation Products of Some Morphine Derivatives 635
[Russian Translation] 637
[German Translation] 638

Simane, J. Polarographic Determination of Oxygen in Blood 640

Doskocil, J. Polarographic Study of Some Biological Redox Indicators 645
[Russian Translation] 648
[English Translation] 649

Doskocil, J. Polarographic Study of Some Periodic Oxidations 651
[Russian Translation] 657
[English Translation] 659

Homolka, J. and V. Krupička. Study of Brdička's Filtrate Reaction in Serum 662
[Russian Translation] 664
[German Translation] 665

Card 11/14

DOSKOCIL, I

Kinetics of alkaline inactivation of aureomycin. p. 711 (Collection of Czechoslovak Chemical Communications. Praha. Vol. 18, no. 6, Dec. 1953)
SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4, No. 6, June 1955, Uncl.

DOSKOCIL, Jiri

Chemical Abst.
Vol. 48
Apr. 10, 1954
General and Physical Chemistry

(2)

Kinetics of the alkaline inactivation of aureomycin. III. Doskočil (Výzkumný ústav antibiotik, Roztoky, Czech.). *Chem. Listy* 47, 603-11(1953).—The kinetics were investigated spectrophotometrically, polarographically, and by a biol. test. The inactivation of aureomycin is a case of general base catalysis. Catalytic coeffs. of OH ions, tertiary phosphates, carbonates, borates, ammonia, secondary phosphates and tertiary citrates were detd., and the validity of the Brønsted relation between basic dissocn. const. and catalytic coeff. was verified. Activation energies for the individual catalyzing bases were computed. Equations for the calcn. of rate consts. from the dissocn. const. and concn. of the catalyzing base are given.
B. Erdös

Issledovatel'skiy insitut anitbiotikov, Roztoki u Pragi.

Doskocil, J.

GERM

Quantitative polarographic determination of oxytetracycline (Terramycin) and chlortetracycline (Aureomycin) admixed. J. Doskočil (Research Inst. Antibiotics, Roztoky, Czech.). *Pharmazie* 9, 394-6(1954).—A review. Details were successfully made by means of the Heyrovský polarograph. G. M. Hocking

MD

Doskočil, J.

CZECH

Bronchopen (Penethamate hydroiodide). A new penicillin preparation with an affinity to lung tissue. J. Doskočil, M. Herold, O. Šmahel, V. Vlček, and D. [redacted] Výzkumný ústav antibiotik, Roztoky, Czech.). *Časopis Lékařů Českých* 93, 1367-70(1954).--Properties and qual. criteria of the hydroiodide of benzylpenicillin diethylaminoethyl ester are mentioned. Clinical observations are reported. I. M. Hais

~~Erbi~~, Doskocil, Jiri

Esters, amino esters, and amides of penicillin. Miloslav Vondráček and Jiří Doskočil. Czech. 85,192, Dec. 1, 1955. Acylation of penicillin G (I) with $COCl_2$ or $ClCOOMe$ gives better yields (80%) than other methods and is more easily controlled. Thus, 8 ml. of a 10% soln. of $COCl_2$ in $CHCl_3$ was added to an ice-cooled suspension of 7.44 g. cryst. K-salt of I in 50 ml. dry $CHCl_3$ and the mixt. shaken until dissolved. The filtrate was treated with 2 ml. dry $Et_2NCH_2CH_2OH$ in 10 ml. $CHCl_3$, mixed well, and let stand 3 hrs. at 20–30°. After shaking with phosphate buffer at pH 7.5, the $CHCl_3$ layer was dild. with 30 ml. ice water, acidified with *N* HCl to pH 3.5, and the aq. phase immediately lyophilized. The resulting dry material crystd. from Me_2CO yielded 6.7 g. of the *diethylaminoethyl ester hydrochloride* of I, m. 142°. Similarly, the *III salt*, m. 168°, was obtained.

L. J. Urbánek

DOSKOCIL-J.

Extraction of tetracycline antibiotics. JiH Doskočil and Milan Dohnal. Czech. 85,339, Dec. 1, 1959. Extn. of chlortetracycline (I) or oxytetracycline with Bu acetate (II) is considerably improved by the presence of 10^{-3} mole of Mg (usually from corn-steep liquor) and 1–3% detergent of the type $RCONHCH_2CH_2NXPh$, wherein R is an aliphatic chain with 10–30 C-atoms and X is a halogen. Fermentation liquid (200 l.) contg. 540 γ I/ml. was acidified with 2 kg. oxalic acid and filtered with the aid of 4 kg. silica. To the filtrate is added 400 g. 2-pyridiniumethyllauramide halide dissolved in hot water, and 20 l. II. The pH is adjusted with const. stirring to 8.0. After standing 1 hr. the clear lower layer is sepd. and rejected. The remainder (30 l.) is centrifuged, and 18 l. of the rich II is extd. with 3 + 2 + 1 l. water. The combined exts. are adjusted with 5% H_2SO_4 to pH 3.0–3.5 and treated with 2% satd. aq. soln. of NaCl. The sepd. cryst. I·HCl weighed 89 g. and assayed 945 γ/mg.

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First International Symosium on Antibioctics in Warsaw. p. 507.

International Embryologic Congerence in Brussels. p. 508.
DAFM

CESKOSLOVENSKA BIOLOGIE (Ceskòlovenska akademie ved. Biologicky ustrav) Praha.

Vol. 4, No. 8, August 1955.

SOURCE: East European Accessions List (EEAL) Library of Congress. Vol. 5, No. 1, January 1956.

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Aureomykoin, Czechoslovakian brand of chlortetracycline. M. Dolnal, J. Doskočil, M. Herold, O. Šmahel, and Vl. Vlček (Výzkumný Ústav Antibiotik, Roztoky, Czech.). *Časopis Lékařů Českých* 94, 1303-6(1955).—Description of chem. properties, dosage forms, side effects, and clinical tests. The pharmacology of Czechoslovakian Aureomykoin. Vojtěch Sobek, Zdeněk Lojda, Rudolf Lukes, and Jiří Jelínek (Charles Univ., Prague). *Ibid.* 1399-1401. Haiz

DOSKOCIL, JIRI.

Extracting tetracycline antibiotics. Jiří Doskočil and Milan Dohnal. Czech. 85,597, Mar. 15, 1956. The addn. of 1–5% detergent considerably improves the extn. To 200 l. filtered fermentation medium of *Streptomyces aureofaciens* contg. 800 γ/ml. was added 500 g. Neokal or 600 g. Syntergit, and the mixt. was extd. at pH 3.5 with AcOEt in horizontal extractors. The ext. (40 l.) was shaken with 8 l. satd. aq. soln. of $Na_2B_4O_7$ under the continuous addn. of 2% soln. of NaOH to pH 9.2. The aq. ext. was pptd. with a soln. of 200 g. $MgSO_4$ in 1 l. H_2O, and the pptd. Mg salt of oxytetracycline (I) was washed, dried *in vacuo*, dissolved in 2 l. 3% MeOH soln. of HCl, and evapd. to 500 ml. to give, on cooling to −10°, 125 g. cryst. I·HCl which assayed 937 γ/mg.

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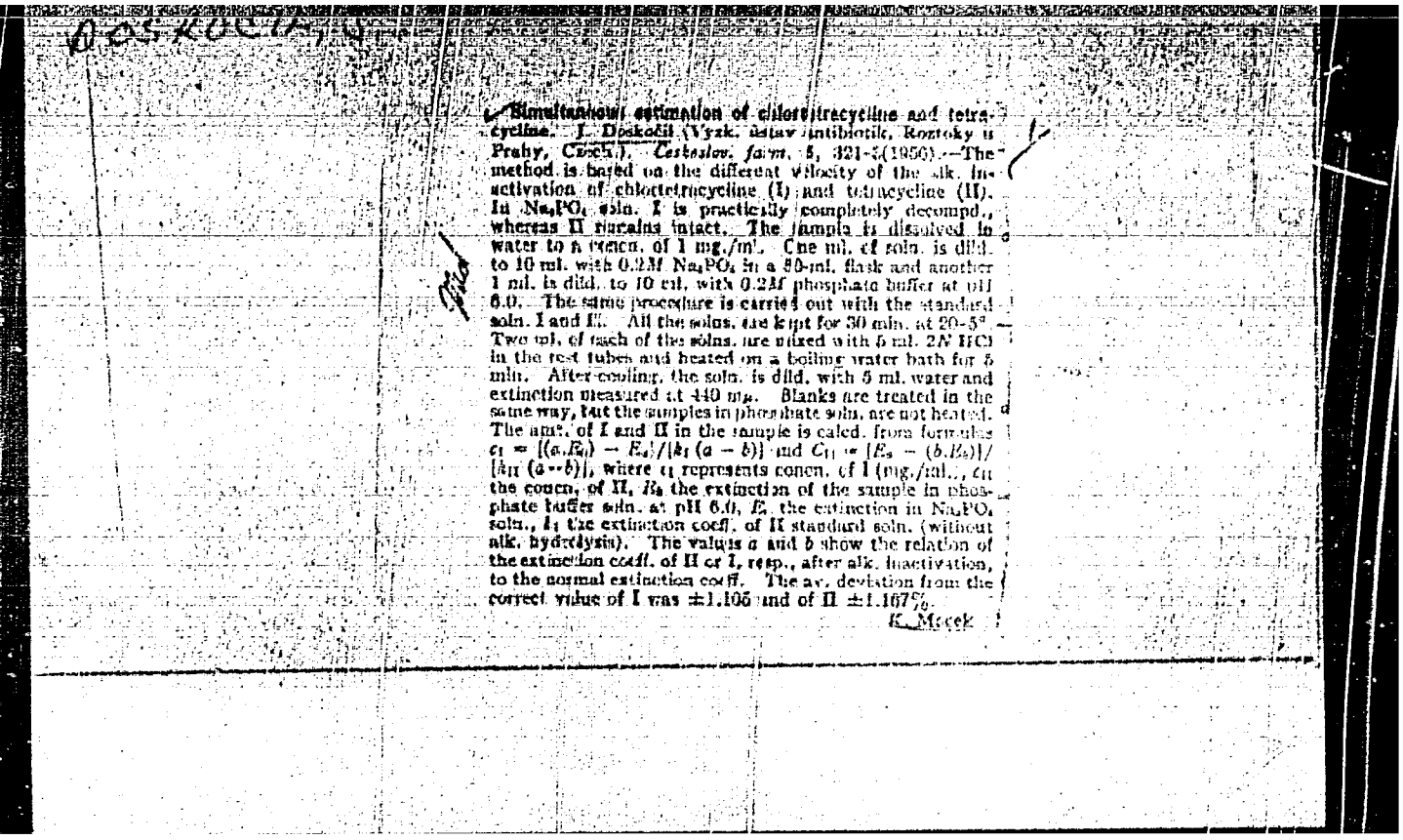
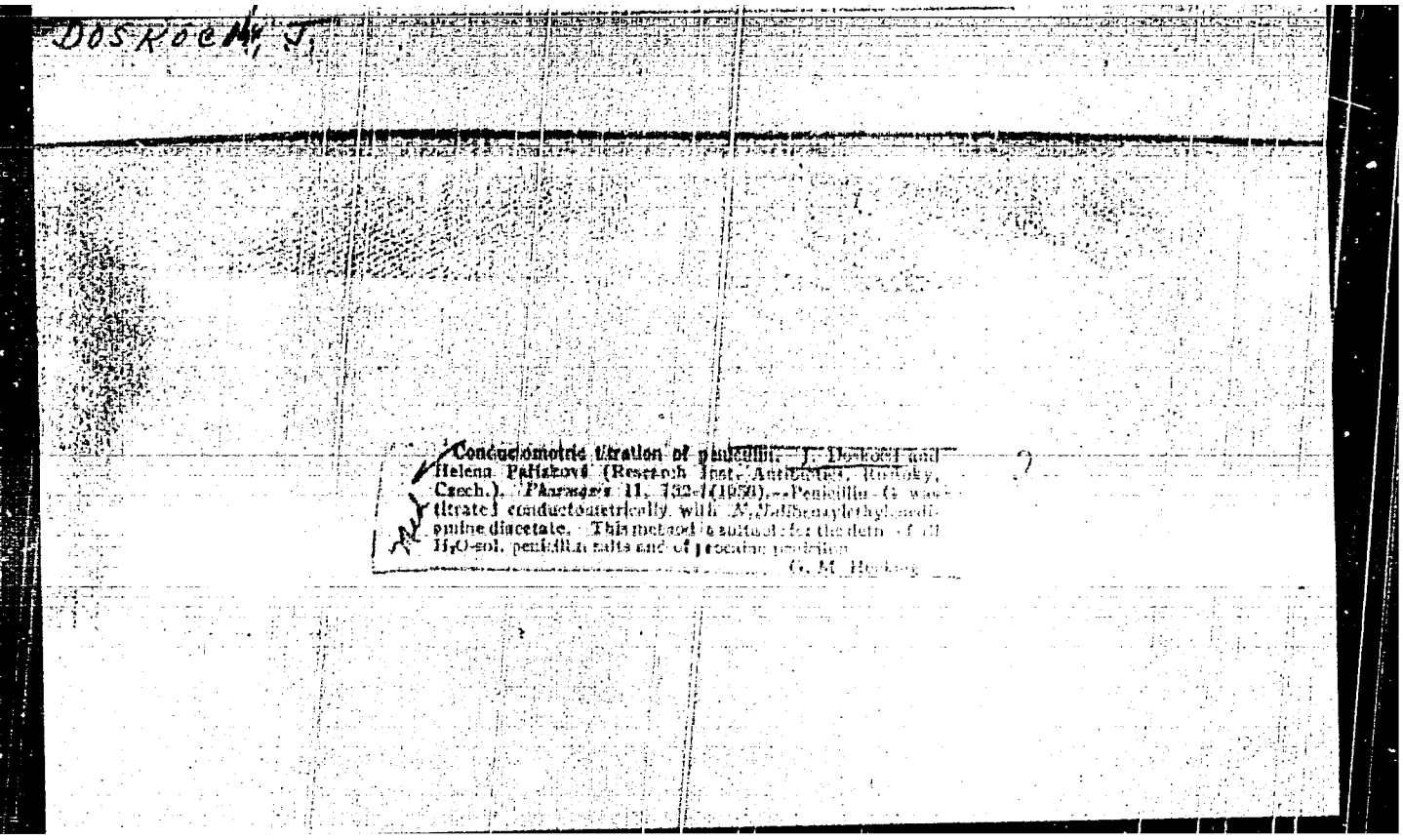


Simultaneous estimation of chlortetracycline and tetracycline. J. Doskočil (Výzk. ústav antibiotik, Roztoky u Prahy, Czech.). *Českoslov. farm.* 5, 321–3 (1956).—The method is based on the different velocity of the alk. inactivation of chlortetracycline (I) and tetracycline (II). In Na_3PO_4 soln. I is practically completely decompd., whereas II remains intact. The sample is dissolved in water to a concn. of 1 mg./ml. One ml. of soln. is dild. to 10 ml. with 0.2*M* Na_3PO_4 in a 50-ml. flask and another 1 ml. is dild. to 10 ml. with 0.2*M* phosphate buffer at pH 6.0. The same procedure is carried out with the standard soln. I and II. All the solns. are kept for 30 min. at 20–5°. Two ml. of each of the solns. are mixed with 5 ml. 2*N* HCl in the test tubes and heated on a boiling water bath for 5 min. After cooling, the soln. is dild. with 5 ml. water and extinction measured at 440 mμ. Blanks are treated in the same way, but the samples in phosphate soln. are not heated. The amt. of I and II in the sample is calcd. from formulas $c_I = [(a.E_b) - E_a]/[k_I(a - b)]$ and $C_{II} = [E_a - (b.E_b)]/[k_{II}(a - b)]$, where c_I represents concn. of I (mg./ml.., c_{II} the concn. of II, E_b the extinction of the sample in phosphate buffer soln. at pH 6.0, E_a the extinction in Na_3PO_4 soln., k_I the extinction coeff. of II standard soln. (without alk. hydrolysis). The values *a* and *b* show the relation of the extinction coeff. of II or I, resp., after alk. inactivation, to the normal extinction coeff. The av. deviation from the correct value of I was ±1.105 and of II ±1.167%.

K. Macek



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Conductometric titration of penicillin. J. Doskočil and Helena Pálišková (Research Inst. Antibiotics, Roztoky, Czech.). *Pharmazie* 11, 132–4 (1956).—Penicillin (G was titrated conductometrically with *N,N*-dibenzylethylenediamine diacetate. This method is suitable for the determination of H₂O-sol. penicillin salts and of procaine penicillin. G. M. Hocking

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Compounds of chlorotetracycline with magnesium and quaternary ammonium bases. p. 800

(Institute of Applied Physics - Czechoslovak Academy of Science) Vol. 50, No. 5 May 1956

SO: Monthly Index of East European Accession (EEAI) LC, Vol. 7, No. 5 May 1958

New methods of biosynthetic production of antibiotics. I.

Biosynthesis of chlorotetracycline without maintaining aseptic conditions. Eduard Vilík, Miloš Herold, and Jiří Doskočil (Výzk. ústav antibiotik, Roztoky u Prahy, Czech.). *Československ. mikrobiol.* 2, 30–6 (1957).—Expts. are described which revealed that fermentative production by *Streptomyces aureofaciens* does not require highly sterile conditions. Yeast (*Torulopsis*) in massive contamination lowers the yield. L. J. Urbánek

F

CZECHOSLOVAKIA / Microbiology. Antibiosis and Symbiosis. Antibiotics.

Abs Jour : Ref. Zhur - Biol., No 21, 1958, No 95028

Author : Belik, E.; Herold, M.; Doskocil, J.

Inst :

Title : New Methods of Biosynthetic Production of Antibiotics. 1. Biosynthesis of Chlortetracycline Without the Maintenance of Aseptic Conditions.

Orig Pub : Folia biol.(Cesko.), 1957, 3, No.4, 229-235.

Abstract : Observation of the utilization of a 24-hour inoculum in a fermentation medium in which chlortetracycline is introduced in a quantity sufficient to carry out the process in non-sterile conditions are reported. Special infection with bacteria, yeasts, poluted water and soil did not lead to a decrease of the antibiotic yield.

Card 1/2

CZECHOSLOVAKIA / Microbiology. Antibiosis and Symbiosis. Antibiotics. F

Abs Jour : Ref. Zhur. - Biol., No 21, 1958 No 95028

Yeasts from p. Torulopsis and an unidentified gram-negative bacillus with massive infection multiplied in the fermentation medium, but only the yeasts decreased the yield of chlortetracycline in this manner.

Card 2/2

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1st European Symposium on the biochemistry of antibiotics in Milan.

p. 293 (Chemie, Vol. 9, no. 2, Apr. 1957, Praha, Czechoslovakia)

Monthly Index of East European Accessions (EEAI) LC. Vol. 7, no. 2, February 1958