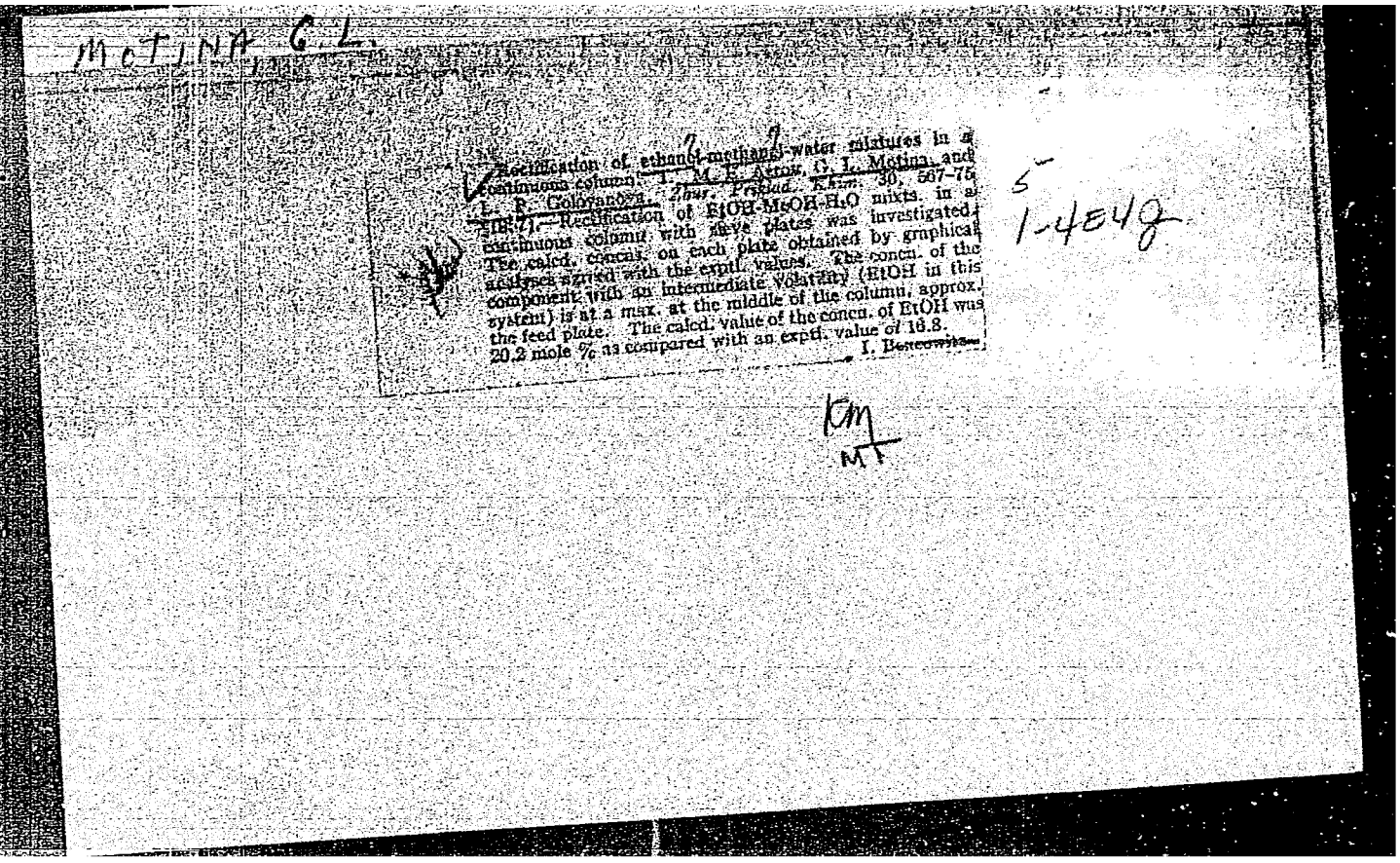
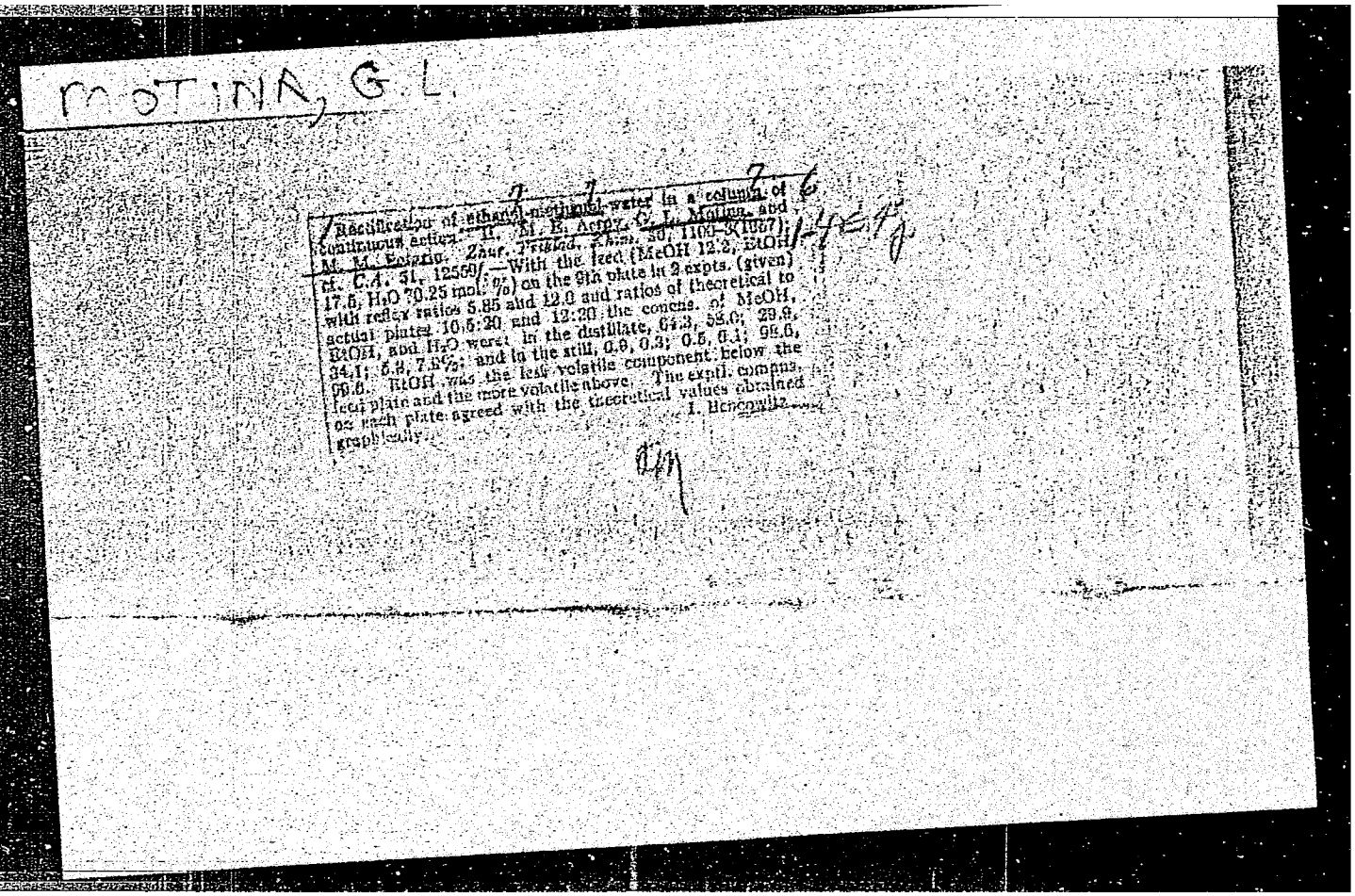


MOLINA, G. L.

5
1-4649

Rectification of ethanol-methanol-water mixtures in a continuous column. I. M. E. Arnow, G. L. Molina, and L. P. Golovanova. *Zhur. Prikład. Khim.* 30, 567–75 (1957).—Rectification of EtOH-MeOH-H_2O mixts. in a continuous column with sieve plates was investigated. The calcd. concn. on each plate obtained by graphical analyses agreed with the expt. values. The concn. of the component with an intermediate volatility (EtOH in this system) is at a max. at the middle of the column, approx. the feed plate. The calcd. value of the concn. of EtOH was 20.2 mole % as compared with an expt. value of 16.8.
I. Beneowitz

km
MT



MOTINA, G. L.

Rectification of ethanol-methanol-water in a column of continuous action. II. M. E. Aerov, G. L. Motina, and M. M. Fetisova. Zhur. Prikład. Khim. 30, 1101-8(1957). C. A. 51, 12550f.—With the feed (MeOH 12.2, EtOH 17.6, H_2O 70.25 mol. %) on the 9th plate in 2 expts. (given) with reflux ratios 5.85 and 12.0 and ratios of theoretical to actual plates 10.5:30 and 12:20 the concns. of MeOH, EtOH, and H_2O were: in the distillate, 64.3, 35.0, 29.9, 34.1, 5.8, 7.8%; and in the still, 0.9, 0.3; 0.5, 0.1; 99.6, 99.6. EtOH was the less volatile component below the feed plate and the more volatile above. The expil. compns. on each plate agreed with the theoretical values obtained graphically. I. Hencowitz

SOKOLOV, A.V.; BERGER, I.I.; GUROVICH, R.E.; KLIMENKO, M.Ya.; ZAYTSEVA, S.S.; MOTINA, G.L.

Method of refining synthetic ethyl alcohol. Khim.prom. no.5:327-330 My '62. (MIRA 15:7)
(Ethyl alcohol)

AEROV, M.E.; MOTINA, G.L.

Study of the rectification of ternary mixtures with limited mutual solubility of components. Khim.prom. no.5:368-372 My '62. (MIRA 15:7)

(Distillation, Fractional)

VOSTRIKOVA, V.N.; GUROVICH, R.E.; AEROV, M.E.; MOTINA, G.L.; ZALYALETDINOVA, R.G.

Separation of acrolein from its low concentration aqueous solutions. Neftekhimiia 3 no.2:254-258 Mr-Ap '63. (MIRA 16:5)

1. Nauchno-issledovatel'skiy institut sinteticheskikh spirtov i organicheskikh produktov.

(Acrolein)

MOTINA, L. F., Cand Tech Sci -- (diss) "Microstructure of Artificial Leather of the Cardboard Type." Mos, 1957. 16 pp (Min of Higher Education USSR, Mos Technological Inst of Light Industry), 100 copies (KL, 48-57, 107)

MOTINA, L.F.; PAVLOV, S.A.

Microstructure of board-type artificial leather. Leg.prom. 17 no.4:26-29 Ap '57. (MLRA 10:4)
(Leather, Artificial--Testing)

MOTINA, L.F., kand.tekhn.nauk; PLOTNIKOV, I.V., kand.tekhn.nauk; PAVLOV, S.A., doktor tekhn.nauk

Fire- and bacteria-resistant materials for mine ventilation pipes. Nauch.-issl.trudy VNIIPIK no.12:30-35 '60. (MIRA 16:2)

(Mine ventilation--Equipment and supplies)
(Protective coatings)

MOTIKA, M.A.

Electrophoresis of penicillin during therapy of suppurative corneal ulcers. Vest.oft. 69 no.3:28-30 My-Je '56. (MLRA 9:8)

1. Iz fizioterapevticheskogo otdeleniya Leningradskogo nauchno-issledovatel'skogo instituta glaznykh bolezney imeni Grishmana (dir. prof. B.P.Kalashnikov)

(ULCER,
cornea, ther., penicillin, electrophoretic method (Rus))
(CORNEA, ulcers,
ther., penicillin, electrophoretic method (Rus))
(ELECTROPHORESIS,
of penicillin in cornial ulcers (Rus))

MOTINA, T.I., SUCHKOV, V.G.

Making leather hydrophobic by means of silicon organic compounds. (MIRA 11:1)
Leg. prom. 17 no.12:18-22 D '57.
(Leather research) (Waterproofing)

MOTINA, T.I.

MOTINA, T.I.; SUCHKOV, V.G.

Producing chromium stearates and using them in the leather industry. (MIRA 11:2)
Leg. prom. 18 no.2:26-28 F '58.
(Chromium organic compounds) (Waterproofing)

DIKOVSKIY, I.I.; MOTINA, T.I.; SUCHKOV, V.G.

Using "chromolan" for imparting water-repellent properties to leather. Kozh.-obuv.prom. 2 no.9:22-25 S '60. (MIRA 13:10)
(Leather)

MOTINA Ye. I.

FD-2180

USSR/Miscellaneous

Card 1/2 Pub. 129-20/20

Author : -

Title : Life in Moscow University

Periodical : Vest. Mosk. un., Ser. fizikomat. i yest. nauk, 10, No 2, 171-178, Mar 1955

Abstract : Six brief notices: I. A. Voronkov, "Scientific relations of Moscow Univ. with peoples' democratic countries." N. Filin, "Exhibition on the history of Moscow University." Anonymous "Scientific council Moscow State U. on the natural sciences." G. I. Rozhkova (head of the chairs) and Ye. I. Motina, "Work of the Chairs of the Russian Language for students and foreign aspirants." Anonymous, "In honor of Prof. N. A. Kachinskiy." O. Kibal'chich, "Defense of dissertations" (The candidate dissertations of the following four were defended at the end of 1954 in the Geographical Faculty: I. F. Antonova, "Power engineering and metallurgy of Canada;" K. P. Kosmachev, "Economic geographical characteristics of agriculture in the region between the rivers Lena and Amga, Yakutsk ASSR;" I. N. Guseva, "Wall maps for the

course 'Physical Geography of the USSR' in higher school; I. M. Klebanova, "Landscape characteristics of the sandy massif of the Northeastern Prikaspiy (Caspian Region).").

Institution : -

Submitted : -

MOTINOV, A.M., inzh.

Experimental installation for hydraulic transportation of solids. Trudy Gidrav. Lab. VODGEO no.10:226-236 '63.
(MIRA 17:8)

MOTINOV, M., predsedatel'.

Publicizing socialist competition. Sov. profsoiuzy 1 no.1:66-69 S '53. (MLRA 6:12)

1. Rostovskiy oblastnyy sovet professional'nykh soyuzov. (Socialist competition)

VARNA, Al.; MOTIOC, N.

The value of sinocarotid denervation in [illegible] sequelae. Rumanian med. rev. [illegible]

MOTIS, J.

"Husband and Wife Working on Locomotive 555.0." p. 23. "Stakhanovites of the Bulgarian Railroads." p. 24 (ZELEZNICE, Vol. 3, No. 1, 1953) Praha, Czechoslovakia

SO: Monthly List of East European Accessions, Library of Congress, Vol. 3, No. 4, April 1954. Unclassified.

HOTIS, J.

"Czechoslovak Railroad Men on the Cerna Ska Republika in China." p. 35
"Chinese Railroads and Railroad Employees." p. 36 (Zeleznice, Vol. 3, no. 2, 1953, Praha)

SO: Monthly List of East European Accessions, Vol. 3, no. 2, Library of Congress, Feb. 1954, Uncl.

MOTIS, J.

"Vasilii Kolesov's Methods Are Successfully Used in Railroad Repair Works." p. 207
(Zeleznice, Vol. 3, no. 9, 1953, Praha)

SO: Monthly List of East European Accessions, Vol. 3, No. 3 Library of Congress, March 1954, Uncl.

MOTIS, J.

"New Technology Day Has Been A School for Technical Cadres and Innovators." p. 232
(Zeleznice, Vol. 3, no. 10, 1953, Praha)

SO: Monthly List of East European Accessions, Vol. 3, No. 3 March 1954, Uncl.

STANESCU, L.; GOCAN, S.; TERTAN, A.; MOTIU, A.; BOGATEANU, G.; POP, O.

Study of some semiconductor characteristics of nickel chromite.
Bul stiint polit Cluj no.5:65-74 '62.

NOTIU, A.

Some aspects of the behavior of the [illegible] system in roentgen analysis. Studii cerc fiz 16 no.[illegible]221-234 '64

1. The "Babes-Bolyai" University, Cluj.

MOTIU, A.

Roentgenographic study of the Pt/C system. Studii cerc fiz 16 no.8: 889-902 '64.

1. "Babes-Bolyai" University, Cluj.

COUNTRY : Rumania
CATEGORY : Analytical Chemistry.

ABS. JOUR. : RZKhim., No. 7, 1959, No. 23069

AUTHOR : Litescu, C.; Motiu, E.
INST. : Rumanian Academy
TITL : New Method for Determining Boric Acid on the Basis of the Reaction of Complex-Formation between Boric Acid and Calcium Gluconate.

ORIG. PUB. : Studii si cercetari chim. Acad. R.P.R. Fil. Cluj, 1957, 8, No 3-4, 243-250

ABSTRACT : It was found that salts of organic hydroxy-acids containing not less than 4 OH-groups in cis-position (not counting the OH-group located in the immediate vicinity of the COOH-group), are capable of forming with H_3BO_3 complex acids of a sufficiently high degree of dissociation, which can be titrated alkalimetrically: visually (in the presence of phenolphthalein), conductometrically, or potentiometrically. On titration with the use of Ca-gluconate (2% solution) as the complex-forming substance, the accuracy of H_3BO_3 determination is of the same order as on titration in the presence of mannitol. It was ascertained polarimetrically that in the complex that is formed the

CARD: 1/2

MACAROVICI, Const, Gh.; PERTE, Eugenia; MOTIU, Emilia

Study on the complex combinations with diaminodiphenylic derivatives. Pts. 10, 12. Studii cerc chimie Cluj 14 no.2:243-263 '63.

1. Institute of Chemistry, Rumanian Academy, Cluj Branch.
2. Corresponding Member of the Rumanian Academy (for Macarovici).

MOTIVILOV, O.A.; ROZHDESTVENSKIY, V.N.

Optical properties of thin films of niobium pentoxide in the infrared spectrum region. Opt.-mekh.prom. 25 no.4:39 Ap '58. (MIRA 11:10)

(Niobium oxides--Spectra)

MOTKA, F.

Filler and roller screens.

p. 51
Vol. 10, no. 3, Mar. 1955
PAPIR A CELULOSA
Praha, Czechoslovakia

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 5, no. 2
February 1956, Uncl.

MOT'KA, Leo, inzh.; MUSATOVA, Yelena [translator]; RAKUSHANOVA, Irena, otv. red.

[Through the most beautiful areas of Czechoslovakia]Po samym krasivym mestam Chekhoslovakii. Prague, Sportovni a turisticke nakladatelstvi, 1962. 233 p. Translated from the Czech. (MIRA 15:10)

(Czechoslovakia—Guidebooks)

MOTKALYUK, O.B.

Effect of water deficiency in the soil at the critical period on the formation of the female gametophyte in barley. Bot. zhur. 50 no.6: 874-879 Je '65. (MIRA 18:7)

1. Leningradskiy pedagogicheskiy institut imeni Gertsena.

USSR/Cultivated Plants - Commercial. Oil-Bearing. Sugar-Bearing. M-5

Abs Jour : Ref Zhur - Biol., No 7, 1958, 29907

Author : Galkina, N.V., Motkhin, I.N.
Inst : -
Title : The Effect of the Associations of the Uzbek Tau-Saghyz, Scorzonera tau-saghyz, on its Seed Renewal.

Orig Pub : Dokl. AN UzSSR, 1957, No 2, 45-48 (Resume in Uzbek)

Abstract : The effect of associative plant groups on the seed renewal of the tau-saghyz, Scorzonera tau-saghyz, was studied. In order to elucidate the influence of various components on the pread of tau-saghyz, plantings in diverse associations were undertaken. Sowing on southern slopes where the vegetation was represented by Salsola montana Litv., produced no shoots. In the presence of Artemisia glanduligera Krasch. solitary shoots were observed which died afterwards. In those associations, however, where Aneurolepidium alaicum Nevski. appeared as the principal component,

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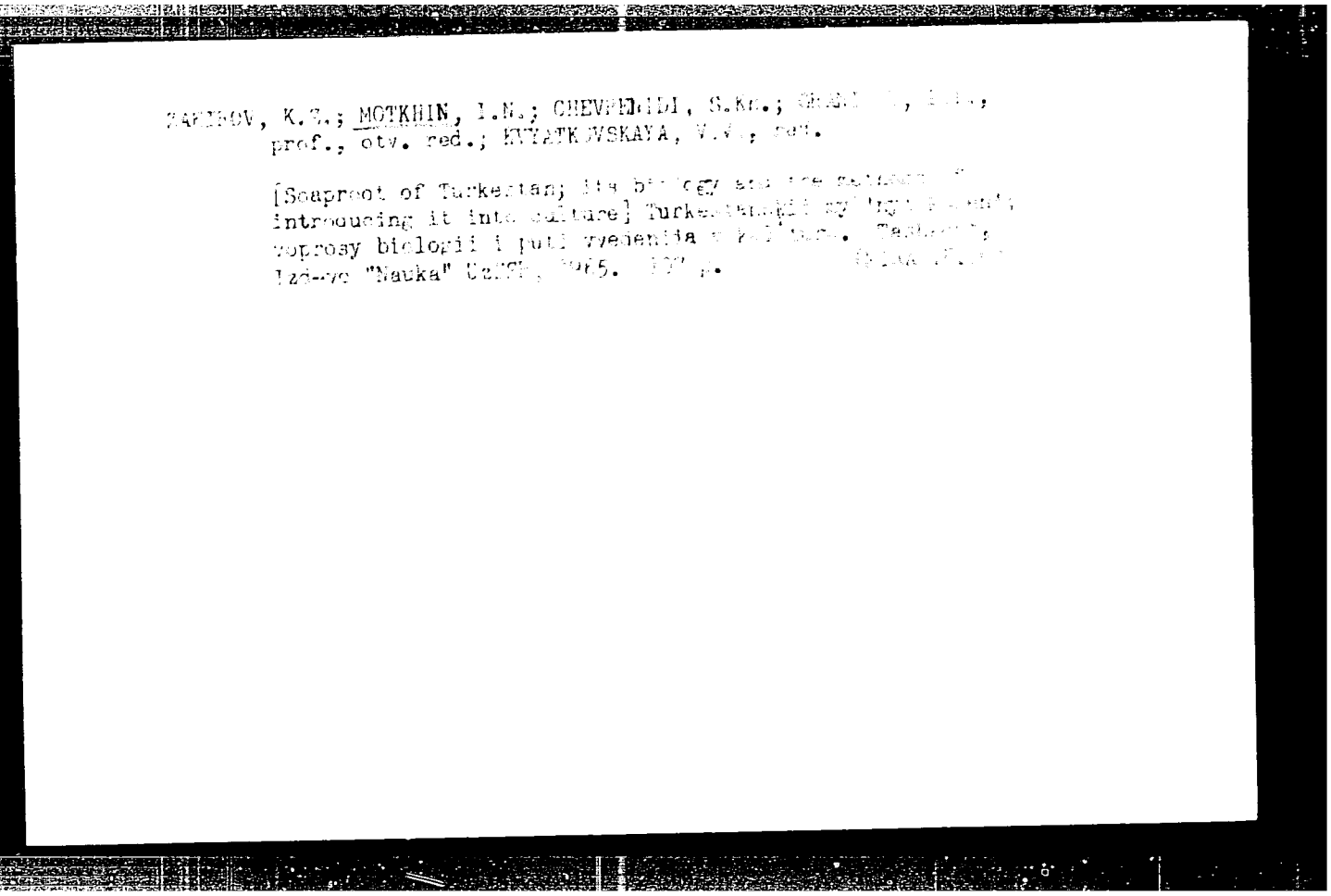
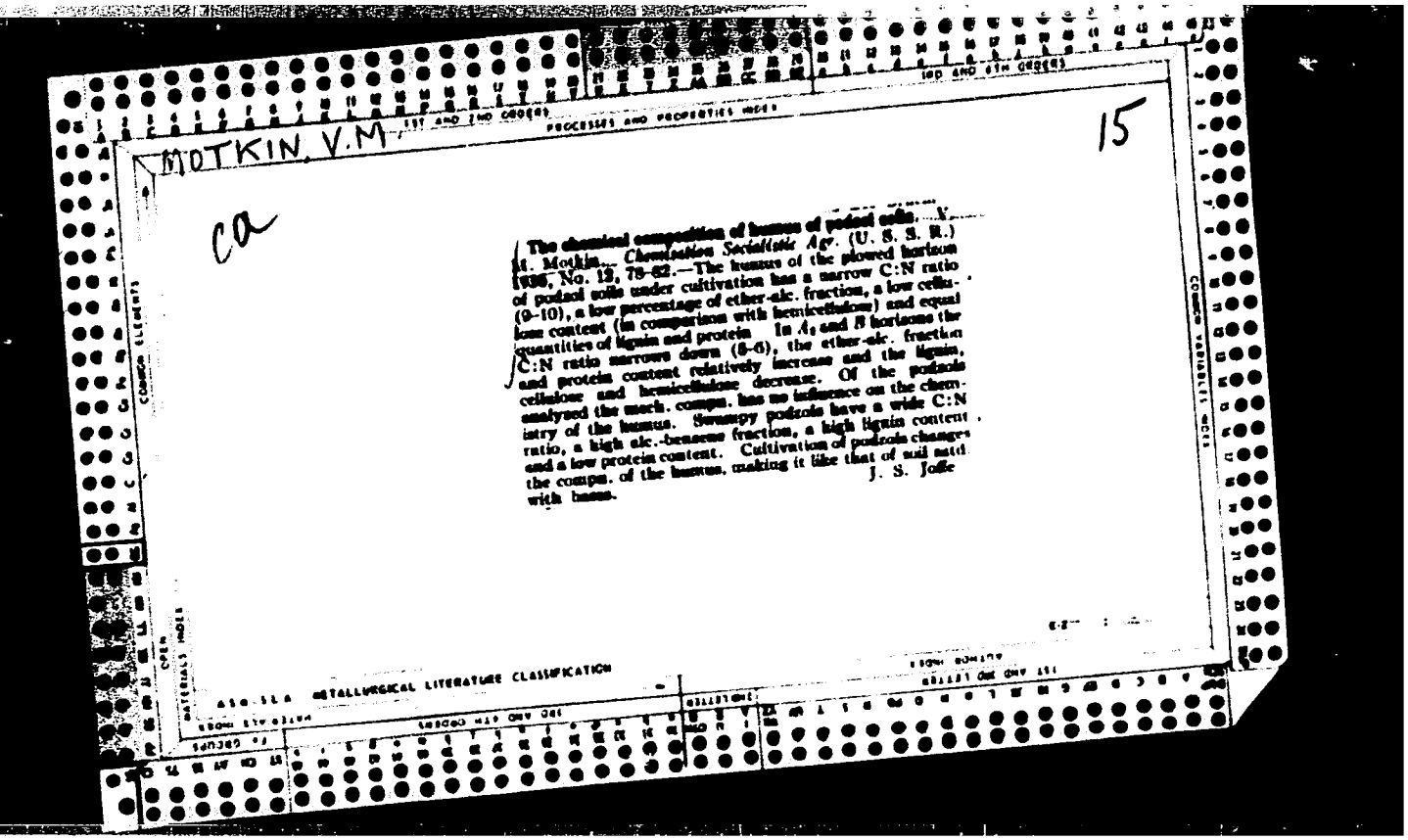


ZAKIROV, K.Z.; MOTKHIN, I.N.; CHEVRENDI, S.K.; [illegible], [illegible];
prof., otv. red.; KVYATKOVSKAYA, V.V., red.

[Soaproot of Turkestan; its biology and the methods of introducing it into culture] Turkestanskaia mylianka, ee biologiia i puti vvedeniia v kul'turu. Tashkent, Izd-vo "Nauka" Uz.SSR, 1965. [illegible] p.

MOT'KIN, L.Z., inzh.

Calculation of air exchange in paint shops. Vod. i san. tekh. no.12:4 D '62. (MIRA 15:12)
(Paint shops)



MCTKIN, V. M.: ILLIUVYEVA, V. I.

Fertilizers and Manures

Use of granulated fertilizers for early potatoes. V. I. Illiuvyeva., Sov. [illegible], no. 3, 1952.

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

MOTKIN, V.M

MOTKIN, V.M.

Effectiveness of organomineral fertilizer mixtures and soil conditions [with summary in English]. Pochvovedenie no.8:93-98 Ag '57. (MIRA 10:11)

1. Leningradskoye otdeleniye Vsesoyuznogo instituta udobreniy, agrotekhniki i agropochvovedeniya.
(Fertilizers and manures)

MOTKINA, B.V. [deceased].

Plotting a layer projection of barite structure on a plane of the symbol (210). Uch.zap.Len.un. no.178:240-248 '54. (MLRA 8:5)
(Barite) (Crystallochemistry)

MOTKOV, Ye. F.

N/5
632.8
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Osnovy agr nomii (Principles of Agronomy) Moskva, Sel'khozgiz, 1954.

317 P. Illus.

MOTKOV, Yevgeniy Fedorovich; TETYUREVA, I.V., redaktor; PAVLOVA, M.M., tekhnicheskiy redaktor

[Fundamentals of agronomy] Osnovy agronomii. Izd. 2-oe, perer. Moskva, Gos. izd-vo selkhoz. lit-ry, 1956. 341 p. (MLRA 10:1)
(Agriculture)

MOTKOVICH, Viktor; KUL'BACHNYY, I.G., doktor tekhnicheskikh nauk, nauchnyy redaktor; PEKELIS, V.D., redaktor; OSTRIROV, N.S., tekhnicheskiy redaktor

[Foundry men of Kolomna] Kolomenskie liteishchiki. Moskva, Vses. uchebno-pedagog. izd-vo Trudrezervizdat, 1956. 46 p. (MIRA 9:12)
(Kolomna--Founding)

MOTL, J.

"Unilateral Atelectasis in the Course of Pleurisy." p. 229.
(Casopis Lekaru Ceskych. Vol. 93, no. 9, Feb. 1954. Praha)

East European Vol. 3, No. 6 4

SO: Monthly List of [redacted] Accessions, Library of Congress, June 1953, Uncl.

MOTL, O.

Ion exchange chromatography in the determination of atabrine. Cesk. farm. 1 no. 11-12:630-632 1952. (CLML 24:1)

1. Of the Institute of Pharmaceutical Chemistry of Charles University, Prague.

JINDRA, A.; MOTL, O.

Ion exchange chromatography in determination of antihistaminics.
Cesk. farm. 1 no. 11-12:632-637 1952. (CIML 24:1)

1. Of the Institute of Biochemstry of Charles University, Prague.

MOTL, O.

CZECH

753. Ion-exchange resins in the analysis of tablets and dragees. A. Jindra and O. Motl (*Českosl. Farmac.*, 1953, 2 [9], 190–191; *Referativnyi Zh., Khim.*, 1954, Abstr. No. 15,090).—The method of Bjorling (*Farm. Revy*, 1949, 48, 281) is applied to the commercial preparations Acedicon [acetyldemethyldihydrothebaine hydrochloride], Parpanit [caramiphen], Syntropan and Trasentin. Tablets or dragees containing 20 to 100 mg of compound are treated with 50 per cent. ethanol and the resulting suspension is filtered through cotton-wool. The residue is extracted several times with 96 per cent. ethanol and the combined filtrates are passed through a column of Amberlite IRA–400 at the rate of 7 ml per min. The column is washed with 40 to 80 ml of hot ethanol and, after dilution with 40 ml of water, the eluate is titrated with 0·1 *N* HCl. E. HAYES

Mott, O.

Ion exchangers in pharmacy. A. Jindra and O. Motl (Charles Univ., Prague). *Pharmazie* 8, 547-55(1953).—A review with 74 references. G. M. Hocking

Motl, O.

MOTL, O.; HEROUT, V.; SORM, F.

"Terpenes. LX. Composition of Juniper Oil", P. [illegible], ([illegible]), Vol. 48, No. 4, April 1954, Praha, Czech.)

SO: Monthly List of East European Accessions ([illegible]), [illegible], [illegible]. 4, [illegible], March 1955, Uncl.

MOTL, O.; JANKU, I.; RASKOVA, H.

Physiological active hydrocarbon fraction of juniper berry oil. Cesk. farm. 4 no.5:240-243 June 55.

1. Z chemickeho ustavu CSAV, oddeleni prirodnich latek a z Farmakologickeho ustavu KU) v Praze.

(FRUITS
juniper berry hydrocarbon fractions, physiol. activity)

CZECHOSLOVAKIA/Chemical Technology. Chemical Products and Their Application. Medicinals. Vitamins. Antibiotics.

H-17

Abs Jour: Ref Zhur-Khim., No 13, 1958, 44282.

Author : Jindra A., Metl O.
Inst :
Title : Use of Ion-Exchangers in Pharmacy. II

Orig Pub: Ceskosl. farmac., 1955, 4, No 7, 343-346.

Abstract: A review. Bibliography 88 references. Part I see RZhKhim, 1954, 45581.

Card : 1/1

MCTL, O.; HEROUT, V.; SORM, F.

"terenes. LXXIV. Junenol, a new sesquiterpene alcohol from the oil of juniper. In German."

p. 785 (Collection of Czechoslovak Chemical Communications, Sbornik Chekhoslovatskikh Khimicheskikh Rabot) Vol. 22, no. 3, June 1957
Prague, Czechoslovakia

SO: Monthly Index of East European Accessions (EEAI) LC. Vol. 7, no. 4, April 1958

MOTL, O

CZECHOSLOVAKIA / Organic Chemistry--Natural compounds and their synthetic analogs G-3

Abs Jour: Ref Zhur-Khimiya, No 8, 1959, 27578

Author : Motl, O., Herout, V., and Sorm, F.; Motl, O., Šykora, V., Herout, V., and Sorn, F.

Inst : Not given

Title : On Terpenes. LXXXV. The Structure of 'Juniper Cam hor', Another Alcohol of the Selinane-Type from Juniper Oil. LXXXVI. The Structure of Two Crystalline Cadinols.

Orig Pub: Collection Czechoslov Chem Commun, 23, No 7, 1293-1296 and 1297-1306 (1958) (in English with a Russian summary)

Abstract: See RZhKhim, 1959, 8394, 8395.

Card 1/1

117

CZECHOSLOVAKIA / Organic Chemistry. Natural Compounds G-3
and Their Synthetic Analogues.

Abs Jour: Ref Zhur-Khimiya, No 5, 1959, 16694.

Author : Motl, Otakar., Herout, Vlastimil, Sorm, Frantisek.
Inst : Not given.
Title : On Terpenes. LXXXV. Structure of "Juniper Camphor", a New Alcohol of Selinan-Type, from Essential Oil of Juniper.

Orig Pub: Chem. listy, 1958, 52, No 1, 116-119.

Abstract: It is demonstrated that the so-called "juniper camphor" isolated from Juniperus Communis L., is 1,10-dimethyl-7-isopropylidene-decalol-1(4,7(11)-selinenol-4) (I). Hydrogenation of I gives selicanol-4 (II), which on dehydration with $SbCl_5$ in pyridine is converted to a mixture of hydro-

Card 1/3

CZECHOSLOVAKIA / Organic Chemistry. Natural Compounds G-3
and Their Synthetic Analogues.

Abs Jour: Ref Zhur-Khimiya, No 3, 1959, 8384.

Abstract: carbons (III). On hydrogenation of III there was obtained selinan (IV), identified by the infrared spectrum. Ozonization of I gives 1,10-dimethyl-decalol-1-one-7 (V) and acetone (identified as phenylsemicarbazone). The infrared spectrum revealed a CH_2-group in III; and in fact, on ozonization of III there was isolated 10-methyl-7-isopropyldecalone-1 (VI). Study of optical activity of I and of II-VI derivatives, as well as study of rotational dispersion curves of the derivatives V and VI, has shown that these substances are optically inactive racemates. 684.6 mg I are hydrogenated in glacial CH_3COOH over Pt (from PtO_2), to get II, yield 622 mg, MP 77.5°. Analogous hydrogenation of III gives IV, $n^{20}D$

Card 2/3

CZECHOSLOVAKIA / Organic Chemistry. Natural Compounds G-3
and Their Syntnetic Analogues.

Abs Jour: Ref Zhur-Khimiya, No 3, 1959, 8555.

Author : Motl, Otakar, Dykera, Vladimir., Marcut Vlastimil., Sorm Frantisek.
Inst : Not given.
Title : On Terpenes. LXXVI. On the Structure of Two Crystalline Cadinols.

Orig Pub: Chem. Listy, 1958, 52, No 2, 315-324.

Abstract: It was ascertained (on the basis of comparison of infrared spectra and physical constants) that two alcohols isolated from essential oil of Juniper, are Δ^{4}-cadinenol-10 (I) and $\Delta^{1(10)}$-cadinenol-4 (II). I is identical with the cadinol previously isolated (Platter P.A., Markus R., Helv. Chim. Acta, 1942, 25, 1174) from essential

Card 1/9

CZECHOSLOVAKIA / Organic Chemistry. Natural Compounds G-3
and Their Synthetic Analogues.

Abs Jour: Ref Zhur-Khimiya, No 3, 1959, 8395.

Abstract: oil of citronella, while II is identical with pilgerol (RZhKhim, 1957, 57606) from the tree Pilgerodendron uviferum (D. Don) Florin. I is converted by the action of HCl to cadinen dihydrochloride (III), while on hydrogenation it forms cadinanol-10 (IV). By the action of perphthalic acid on I was prepared a mixture of crystalline oxides (Va, b). Reduction of Vb with $LiAlH_4$ results in cadinandiol-5,10 (VI), the oxidation of which yields cadinanol-10-one-5 (VII). VII forms with CH_3MgI a product that is converted (by dehydration and dehydrogenation) to 5-methyl-cadalin (VIII). Dehydration of IV gave a mixture of hydrocarbons containing 50% of a hydrocarbon with a methylenic double bond. Ozonization of this

Card 2/9

CZECHOSLOVAKIA / Organic Chemistry. Natural Compounds G-3
and Their Synthetic Analogues.

Abs Jour: Ref Zhur-Khimiya, No 3, 1959, 8395.

Abstract: hydrocarbon mixture gave 4-isopropyl-6-methyl-decalone (Ia). On the basis of the course of these reactions it can be considered that the hydroxy-group of I is equatorial, which is in accord with the ready ester-formation by the hydroxyl group. On dehydration-dehydrogenation with S, II is converted to cadalin. Hydrogenation of II gave cadinol-4 (A), which yielded on dehydration a hydrocarbon from which was synthesized, by ozonization, a diketo-alcohol (IIa). Under ordinary conditions II is not esterified, which indicates an axial position of OH. Since relative configuration of cadinene dihydrobromide had been determined previously, (see RZhKhim, 1958, 76438), the authors attribute to I and II the

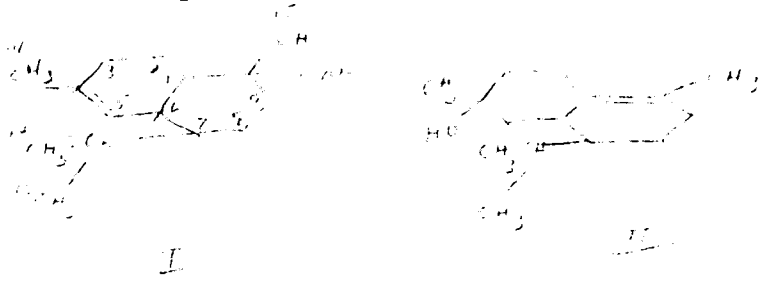
Card 3/9

98

CZECHOSLOVAKIA / Organic Chemistry. Natural Compounds G-3
and Their Synthetic Analogues.

Abs Jour: Ref Zhur-Khimiya, No 3, 1959, 8395.

Abstract: spatial formula shown below.



I

II, MP 139-140°, $[\alpha]_D^{20}$ - 109° (c 2.74; alcohol), was obtained from essential oil of juniper, of

Card 4/9

CZECHOSLOVAKIA / Organic Chemistry. Natural Compounds G-3
and Their Synthetic Analogues.

Abs Jour: Ref Zhur-Khimiya, No 3, 1959, 8395.

Abstract: Slovak origin, by fractionation of sesquiterpene alcohols in a column having an efficiency of 30 theoretical plates, followed by crystallization of the fraction of BP 123-125°/2mm. I, MP 74.5°, $[\alpha]_D^{20}$ - 47° (c 8.00; chloroform), was obtained, a) from essential oil of juniper mother-liquor (following separation of II), over the p-nitrobenzoate, MP 138°, $[\alpha]_D^{20}$ - 67.4°; b) from essential oil of citronella, by distillation in a glass bubbler-cap column (54 theoretical plates) from the fraction of BP 134-139°/2 mm, after chromatography on Al_2O_3 (activity III-IV) and purification over the p-nitrobenzoate. Into a solution of 311 mg I in a mixture of 20 ml dioxane and 5 ml water.

Card 5/9

CZECHOSLOVAKIA / Organic Chemistry. Natural Compounds C-3 and Their Synthetic Analogues.

Abs Jour: Ref Zhur-Khimiya, No 3, 1959, 8395.

Abstract: is passed for 3 hours dry HCl, to get I, MP 118-118.5° (from ethyl acetate), $[\alpha]_D^{20}$ - 39.7° (c 3.27; chloroform). On treatment of 11.6 g I with porphthalic acid in ether (15 hours at 5-10°) there are obtained 11.1 g of a neutral fraction which (5 g) is subjected to chromatography on Al_2O_3 (neutr., activity III). By elution with C_6H_6 is separated Va, yield 1.1 g, MP 84.5-85.5° (from petroleum ether), $[\alpha]_D^{20}$ - 48.2° (c 1.65; chloroform). By elution with C_6H_6 and ether is separated Vb, yield 2.2 g, MP 120-121° (from petroleum ether), $[\alpha]_D^{20}$ - 40.4° (c 4.27; chloroform). By action of CH_3MgI (from 0.40 g Mg and 2.30 g CH_3I) on 0.4 g Vb, is obtained 1-methyl-

Card 6/9

CZECHOSLOVAKIA / Organic Chemistry. Natural Compounds G-3
and Their Synthetic Analogues.

Abs Jour: Ref Zhur-Khimiya, No 3, 1959, 8395.

Abstract: -ordinandiol-5,10, yield 0.4 g, MP 209-210°. Dehydration of the latter (0.3 g) by heating with 4 ml CH_3COOH and 2 drops 70% $HClO_4$ (30 minutes at 100°) and dehydrogenation of the product with 0.11 g S (3 hours at 210-250°) followed by chromatography on alkaline Al_2O_3, gives ordalin; picrate, MP 113°. Reduction of 1.5 g Vb with $LiAlH_4$ gives VI, yield 1.3 g, MP 214-215°. Oxidation of 0.85 g VI with CrO_3 in CH_3COOH gives VII, MP 109-109.5° (from petroleum ether). Reaction of 430 mg VII with CH_3MgI in ether, dehydration of the product (0.44 g) in CH_3COOH 4.4 ml with 2 drops of $HClO_4$ (1 hour, 100°), and chromatography on Al_2O_3, followed by dehydrogen-

Card 7/9

CZECHOSLOVAKIA / Organic Chemistry. Natural Compounds G-3
and Their Synthetic Analogues.

Abs Jour: Ref Zhur-Khimiya, No 3, 1959, 8395.

Abstract: ation of the product (160 mg) with S (66.5 mg) (3 hours at 210-245°), give 118 mg of VIII; picrate, MP 103-103.8°; styphnate, MP 130.5-131.5°; trinitrobenzoate, MP 109.5-111.3° (from alcohol) and 112-112.5° (from 80% CH_3COOH); trinitrotoluate, MP 86-87°. Hydrogenation of I over skeleton Ni in alcohol, gives IV, MP 130-131°, $[\alpha]_D^{20}$ - 88.5° (c 1.65; chloroform); p-nitrobenzoate, MP 154°, $[\alpha]_D^{20}$ - 100° (c 2.98; chloroform). Dehydration of 1.3 g IV with 2 ml $SOCl_2$ in 20 ml pyridine, and chromatography of the product on Al_2O_3 (neutr., activity I-II) give 0.90 g of a hydrocarbon BP 135-145° (bath temperature)/8 mm, the ozonization of which permits isolation of IX, MP 72.5-74° (from petroleum ether). Hydrogenation

Card 8/

MOTL, O.; HEROUT, V.; SORM, F.

Terpenes. CXII. The composition of the oil from Juniper oxycedrus L. berries. Coll Cz Chem 25 no.6:1656-1661 Je '60.
(EEAI 10:9)

1. Department of Natural Products, Institute of Chemistry, Czechoslovak Academy of Science, Prague.

(Terpenes) (Juniper)

DOLEJS, L.; MOTL, O.; SOUCEK, M.; HEROUT, V.; SORM, F.

On terpenes. Part 108: Epimeric aromendendrenes. Stereoisomerism of ledol, viridifluorol and lobulol. Coll Cz Chem 25 no.5:1483-1491 My '61.

1. Department of Natural products, Institute of Chemistry, Czechoslovak Academy of Sciences, Prague.

PENTEGOVA, V.A.; MOTL, O.; GEROUT, V.

Isolation of (+)-δ-cadinol from Pinus sibirica R.Mayr oleoresin and its identity with torreyol and sesquigoyol. Dokl.AN SSSR 138 no.4:850-851 Je '61. (MIRA 14:5)

1. Institut organicheskoy khimii i biokhimii Chekhoslovatskoy Akademii nauk i Khimiko-metallurgicheskiy institut Sibirskogo otdeleniya AN SSSR. Predstavleno akademikom B.A.Kazanskim.
(Oleoresins) (Cadinol)

(27)

Prague, Collection of Czechoslovak Chemical Communications, Vol 27, No 4, April 1962 (continued)

and A. ANDRZEJAK of the Institute of Chemical Technology at A. Mickiewicz University in Poznan, Poland; pp 979-986.

28. "On Terpenes. Part CXXXV. Composition of the Oil from the Leaves of Lindera strychnifolia F., Institute of Organic Chemistry and Biochemistry at the Czechoslovak Academy of Sciences, Prague; pp 987-993 (English article). C. MOTL and V. LUKES,

29. "On Proteins. Part LXIX. The Primary Structure of Sperm Whale Myoglobin in View of the General Principles Governing the Structure of Proteins," F. SORM, Institute of Organic Chemistry and Biochemistry at the Czechoslovak Academy of Sciences, Prague; pp 994-1000 (English article).

30. "On Proteins. Part LXX. Analysis of the Primary Structure of Horse Heart Cytochrome C," F. SORM, Institute of Organic Chemistry and Biochemistry at the Czechoslovak Academy of Sciences, Prague; pp 1001-1008 (English article).

31. "Dependence of DNA Hydrolysis, by DNase II, on the Activity of DNA," J. SKIVERT and Z. SORMOVA of the Institute of Organic Chemistry and Biochemistry, at the Czechoslovak Academy of Sciences, Prague; pp 1009-1013 (English article);

32. "Contributions to the Contents of Arsenic Acids at Higher Temperatures," A. KLAZEK, V. CASLAVSKA and V. FREI. From the Metallurgical Institute of the Czechoslovak Academy of Sciences, and the Inorganic Chemistry Institute of Charles University, Prague; pp 1014-1018.

33. "The Ferrite of Bivalent Cobalt, Obtained with the Wet Process, and Its Roentgenographic Study," J. VAVRA and J. CASLAVSKY. From the Research Institute for Sound and Picture Reproduction Engineering, Prague; and the Metallurgical Institute of the Czechoslovak Academy of Sciences, Prague; pp 1018-1020.

34. "The Polarography of the Anhydride and Monomethylamide of Maleic Acid," M. MATUROVA, A. NEMCEKOVA and F. SANTAVY of the Chemical Institute at Palacky University in Olomouc; pp 1021-1024.

35. "The Coulometric Micro Determination of Hydrogen in Compounds," J. SOUCEK, Research Institute for Macromolecular Chemistry, Brno; pp 1024-1028.

36. "The Direct Titration of Nitrites with Tetravalent Lead Acetate," A. MORALES of Santiago University, Chile, and J. ZYKA of the In-

MOTL, C.

Chile

CHOW, W.Z.; MOTL, O.; SORM, F.

On terpenes. Part 140 : Composition of the oil from Atractylodes lancea Thunb. The structure of hinesol. Coll Cz Chem 27 no.8:1914-1926 Ag '62.

1. Institute of Organic Chemistry and Biochemistry, Czechoslovak Academy of Sciences, Prague. 2. On leave of absence from the Institute or Organic Chemistry, Academia Sinica, Shanghai (for Chow).

CZECHOSLOVAKIA

L. VOLICER, I. JANKU and O. MATL, Institute of Pharmacology of the Czechoslovak Academy of Sciences (Farmakologicky ustav CSAV) and Institute of Organic Chemistry and Biochemistry, Prague (Ustav organicke chemie a biochemie).

"Some Central Effects of a Schizandra chinensis Extract."

Prague, Activitas Nervosa Superior, Vol 5, No 2, May 63; pp 165-166.

Abstract : Low peroral doses of a petroleum ether extract of Schizandra chinensis lowered the threshold of susceptibility of mice to convulsions induced by nicotine 5 mg./Kg. i.v.; methylphenidate has similar but weaker effect; also amphetamine. Graph, 3 Soviet references.

1/1

MOTL, O.

"Perfume and flavor materials of natural origin" by S. Arctander.
Reviewed by O. Motl. Chem listy 57 no.7:742-743 Jl '63.

MOTL, O.; HEROUT, V.; SORM, F.

On terpenes. Pt. 164. Coll Cz chem 29 no.7:1675-1688 Jl '64.

1. Institute of Organic Chemistry and Biochemistry, Czechoslovak Academy of Sciences, Prague.

L 13212-66
ACC NR: AP6006100 SOURCE CODE: CZ/0053/65/014/004/0319/0320

AUTHOR: Volicer, L.; Motl, O.; Trivedi, B.

ORG: Institute of Pharmacology, CSAV, Prague (Farmakologicky ustav); Institute of Organic Chemistry and Biochemistry, CSAV, Prague (Ustav organicke chemie a biochemie CSAV)

TITLE: Pharmacology of extracts from Angelica sinensis and isolation of ligustilid [This paper was presented during the Twelfth Pharmacologic Days, Smolenice, 29 Jan 65.]

SOURCE: Ceskoslovenska fysiologie, v. 14, no. 4, 1965, 319-320

TOPIC TAGS: processed plant product, pharmaceutical, drug, lactone, pharmacology, drug effect

ABSTRACT: "Tang kuej", an ancient Chinese remedy for dysmenorrhea and related diseases is probably prepared from the root of Angelica sinensis Diels, and from this plant the authors isolated an unsaturated bicyclic lactone with potent spasmolytic effect in vitro and in vivo. Orig. art. has: 1 figure. [JPRS]

SUB CODE: 06 / SUBM DATE: none / OTH REF: 004

jrn

Card 1/1

MOTL, O.; LUKES, V.

On terpenes. Pt.173. Coll Cz Chem 30 no.3:917-919 Mr '65.

1. Institute of Organic Chemistry and Biochemistry of the Czechoslovak Academy of Sciences, Prague. Submitted June 11, 1964.

CZECHOSLOVAKIA

MOTL, O; HOMANUK, M; HERROUT, V

Institute of Organic Chemistry and Biochemistry, Czechoslovak Academy of Sciences, Prague (for all)

Prague, Collection of Czechoslovak Chemical Communications, No 5, May 1966, pp 2025-2053

"On terpenes. Part 178: Composition of the oil from Amorpha fruticosa L. fruits structure of (-)-γ-amorphene."

CZECHOSLOVAKIA / INDIA

TRIVEDI, B.; VOLICER, L.; MOTL, O.; Institute of Organic and Biological Chemistry, Czechoslovak Academy of Sciences (Ustav Organicke Chemie a Biochemie CSAV), Prague; Pharmacological Institute, Czechoslovak Academy of Sciences (Farmakologicky Ustav CSAV), Prague.

"A Spasmolytic Substance Obtained From the Drug "Tang-kuej" (Angelica Sinensis Diels)."

Prague, Ceskoslovenska Farmacie, Vol 15, No 4, May 66, pp 206-209

Abstract [Authors' English summary modified]: Pharmacological action of chloroform, ethanol, and light petroleum extracts from the Chinese drug "tang-kuej" was investigated. The light petroleum extract has a spasmolytic, analgesic, central depressant, and hypothermic effect. Ligustilid was identified as the active substance in the spasmolytic effect. Ethanol extract was as active as the light petroleum extract; chloroform extract was less active. 3 Figures, 2 Tables, 3 western, 1 Czech, 5 Japanese, 5 Chinese references. (Manuscript received 18 May 65).

1/1

VOLICER, L.; JANKU, I.; MOTL, O.

Some central effects of schizandra chinensis extract. Activ. nerv. sup. 5 no.2:165-166 My '63.

1. Farmakologicky ustav CSAV, Praha - Ustav organicke chemie a biochemie, Praha.
(CENTRAL NERVOUS SYSTEM) (NICOTINE)
(ANALEPTICS) (AMPHETAMINE)
(METHYLPHENIDATE)

MOTLIK, K.

"How to Economize in Alloy Metals" p. 5, (HUTNIK, Vol. 3, no. 1, Jan. 1953, Praha, Czechoslovakia).

SO: Monthly List of East European Accessions, LC, Vol. 2, No. 11, Nov. 1953, Uncl.

BLEHA, O.; POLAK, E.; MOTLIK, K.

Primary aldosteronism. II. Sborn. lek. 59 no.9:259-264 Sept 57.

1. III. interni klinika fakulty vseobecneho lekarstvi KU v Praze, prednosta akademik Josef Charvat Chirurgicka klinika hygienicke fakulty KU v Praze, prednosta prof. Dr. Emerich Polak II. pathologicko-anatomicky ustav fakulty vseobecneho lekarstvi KU v Praze, prednosta prof. Dr. Vaclav Jedlicka. O. B. III. interni klinika, Praha 2, U nemocnice 1.

(ALDOSTERONE
aldosteronism, primary, case report (Cz))

PACOUSKY, Vladimir; KOMARKOVA, Alena; MOTLIK, Karel

Contribution to the problem of kaliopenic nephropathy in primary aldosteronism. Sborn. lek. 59 no.9:270-282 Sept 57.

1. III. interni klinika fakulty vseobecneho lekarstvi KU v Praze, prednosta akademik Josef Charvat. Ustredni laboratore fakultni nemocnice v Praze 2, prednosta prof. Dr. Jaroslav Horejsi. II. pathologickona anatomicky ustav fakulty vseobecneho lekarstvi KU v Praze prednosta prof. Dr. Vaclav Jedlicka. V. P., Praha 10, Prubezna 656.

(KIDNEY DISEASES, compl.
kaliopenic nephropathy in primary aldosteronism (Cz))
(POTASSIUM, defic.
same)

HRADEC, E.; BOREK, Z.; VENTA, J.; VALENTA, O.; MOTLIK, K.

Clinical aspects with special reference to the diagnosis of urological complications in gynecological cancer. Acta univ. carol. [med.] Suppl. 14:339-363 '61.

1. II. chirurgicka klinika fakulty vseobecneho lekarstvi University Karlovy v Praze, prednosta doc. dr. J. Lhotka I. gynekologicka klinika fakulty vseobecneho lekarstvi University Karlovy v Praze, prednosta prof. dr. K. Klaus Ustav pro peci o matku a dite v Praze, reditel doc. dr. J. Vojta II. patologickoanatomicky ustav fakulty vseobecneho lekarstvi University Karlovy v Praze, prednosta prof. dr. V. Jedlicka.
(GENITALIA FEMALE neopl) (UROLOGY)

37

Prague, Vnitrni Lekarstvi, Vol VIII, No 1, January 1962

1. "Protein Excretion in Renal Disease," A. KLIKA and J. KOTLIK, OUNZ (Okresni ustav narodniho zdravi; County Institute of Public Health), Prague-East, Factory Health Center (Zavodni zdravotnicke stredisko), AZL [not identified], First Clinic of Internal Medicine (I. vnitrni klinika), Faculty Hospital Pod Petrinem, Prof Vladimir Jedlicka, MD, D Sc, director (prednosta); pp 1-10 [English summary].

2. "The Lung Elasticity in Chronic Pulmonary [illegible] and in Cor Pulmonale," H. KUTES, J. VINCKLOVA, Chair of [illegible] Pediatrics (Katedra preventivni pediatrie), Department of Adolescence Medicine and Chair of Hospital Pediatrics (Oddeleni dorostoveho lekarstvi a katedra nemocnicni pediatrie), Department of Physical-Culture Medicine (Oddeleni telovychovneho lekarstvi) [illegible] Fakulta [illegible] Lekarstvi; Faculty of Pediatrics], [illegible] University; Charles University], Prague; pp 11-17 [English summary].

3. "The Significance of Glutaro-Oxalacetic Transaminase in the Serum for Early [illegible] of Liver, Biliary [illegible] Pancreatic Diseases," Josef PRAZAK, Hana KLAUSOVA, and Jaroslav [illegible], First Clinic of Internal Medicine (I. vnitrni klinika), [illegible] (see item 2), Prof Vladimir JEDLICKA, MD, D Sc, director (prednosta), Central Laboratories (Ustredni laboratore) [illegible] [Fakultni nemocnice; Faculty Hospital] Pod Petrinem; Jaroslav [illegible], MD, director (prednosta); pp [illegible]-26 [English summary].

4. "The Problem of High Glutamooxalacetic Transaminase Level (SGOT) in Heart Disease and Its Relation to the [illegible] Centrilobular Liver Necrosis," J. PRAZAK, J. KOTLIK, [illegible], [illegible], K. MOTLIK, First Clinic of Internal Medicine FN [see item 3], Pod Petrinem, Prof Vladimir JEDLICKA, MD, director (prednosta), Central Laboratories FN Pod Petrinem [see item 3], Primarius Jaroslav KOTAS, MD, director (prednosta), Second Institute for Pathological Anatomy (II. ustav pro patologickou anatomii), Prof Vaclav JEDLICKA, MD, director (prednosta); pp 27-35 [English summary].

5. "The Diagnosis of Pulmonary Embolism," J. LIBAL and H. KUOLEROVA, First Clinic of Internal Medicine FN, Hospital Pod Petrinem [see item 2 and 3], Prof Vladimir JEDLICKA, MD, D Sc, director (prednosta); pp 36-46 [English summary].

— 1/1 —

MOTLIK, K.

KANDRAC, M.S.; ELEFANT, E.; ZINGER, P.; VALIK, A.; MOTLIK, K.

Some problems of adrenal cortex function in the salt-losing adrenogenital syndrome. Cas. lek. cesk. 102 no.41:1119-1125 11 O '63.

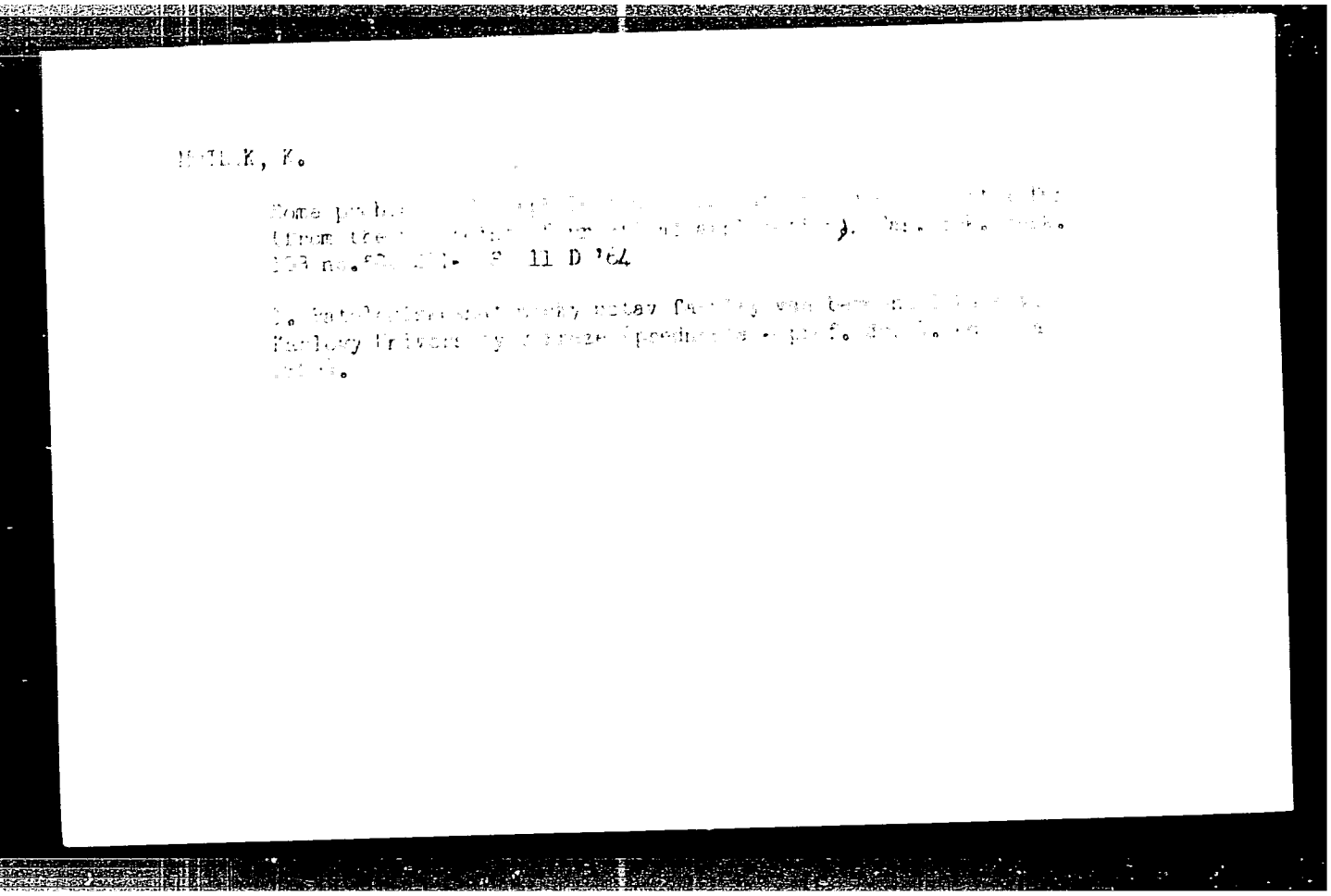
1. Laborator pro endokrinologii a metabolismus fakulty vseobecneho lekarstvi KU v Praze, prednosta akademik J. Charvat. III detska klinika fakulty vseobecneho lekarstvi KU v Praze, prednosta prof. dr. O. Vychytil. II patologickoanatomicky ustav fakulty vseobecneho lekarstvi KU v Praze, prednosta prof. dr. V. Jedlicka.

(ADRENOGENITAL SYNDROME) (STEROIDS)
(ELECTROCARDIOGRAPHY) (CORTICOTROPIN)

MOTLIK, K.; JANOUSKOVA, M.; HRADEC, E.; SMAT, V.

Some macroscopic indices on the distribution of medulla in human adrenal glands (morphological contribution to the problem of so-called medullectomy). Rozh. chir. 43 no.4:233-242 Ap '64.

1. II. patologickoanatomicky ustav (prenosta prof. dr. V. Jedlicka) a II. chirurgicka klinika (prednosta prof. dr. J. Lhotka) fakulty vseobecneho lekarstvi KU [Karlova Universita] v Praze.



WILK, K.

11 D '64

MOTLIK, K.; KUCHEL, O.; KANDRAC, M.S.; GREGOROVA, I.; HORKY, K.

Hyperadrenocorticism accompanying extraadrenal and extra-hypophyseal neoplasms. Endokr. Pol. 16 no.2:113-131 Mr-Ap'65.

1. Faculty of General Medicine, Charles University, Praha (Prague); IInd Institute of Morbid Anatomy (Director: Prof. dr. V. Jedlicka, DSc.); IIIrd Clinic of Internal Medicine and the Laboratory for Endocrinology and Metabolism (Director: Academician J. Charvat).

CZECHOSLOVAKIA / Forestry. Forest Cultures K-5

Abs Jour: Ref Zhur-Biol., No 10, 1958, 43978

Author : Motlik, Vlastimil

Inst : Not given

Title : Causes of Unsuccessful Forestation

Orig Pub: Lesn. prace, 1957, 36, No 5, 208-210

Abstract: It is pointed out that the presence of still unforested areas in Czechoslovakia where forest growth has been checked as a result of elemental factors is explained by the one-sided practice of using single cultures of either coniferous or deciduous trees. Routine application of the grove system in cultures without taking into account the concrete ecological and biological factors has also had adverse consequences. - M. K. Bush

Card 1/1

HOLESKOVA, E.; MOTLIKOVA, M.; SEKLA, B.; WAGNER, V.

The resistance of varioys strains of rats to Walker 256 tumor and serological responses to a single antigenic impulse. Neoplasma, Bratisl. 7 no.1 suppl:42-43 '60.

(NEOPLASMS immunol)

MOTLIKOVA,M.; WAGNER,V.; KOUBA,K.

Hemolysin tests with cattle erythrocytes in the diagnosis of infectious monomucleosis. Cesk. pediat. 19 no.1:41-46 Ja'64.

1. Mikrobiologicke oddeleni nemocnice v Praze 8 na Bulovce a Infekcni klinika nemocnice v Praze 8 na Bulovce; prednosta: prof.dr.J.Prochazka, DrSc.

*

WAGNER, V.; HOLECKOVA, E.; ZALY, V.; MOTLIKOVA, P., SEKLA, B.

Reaction to Brucella abortus in rats resistant and susceptible to tumour homografts. Neoplasma (Bratisl.) 12 no.1:35-43 '65

1. Public Health Laboratory, Prague; Physiological Institute, Czechoslovak Academy of Sciences, Prague; Institute of Health Service Organization, Charles University, Prague; Department of Microbiology, Hospital Bulovka, Prague; Department of General Biology, Charles University, Prague, Czechoslovakia.

SEDLAK, Jiri; DLABAC, Vladimir; MOTLIKOVA, Maria

The taxonomy of the Serratia genus. J. hyg. epidem. (Praha) 9 no.1:45-53 '65.

1. Institut of Microbiology, Medical Faculty of Hygiene, Charles University, Prague.

MOTLOCH, Z.; MYSLIVC, T.

MOTLOCH, Z.; MYSLIVC, T. **Distribution of nonmetallic inclusions and their relation to formation of sedimentation cone in the ingot.** p. 253.

Vol. 11, no. 4, Apr. 1956
HUTNICKE LISTY
TECHNOLOGY
Czechoslovakia

So: East European Accession, Vol. 6, No. 5, May 1957

Z/036/60/000/001/002/002
A205/A126

18 1220

AUTHORS: Motloch, Zdeněk, and Saip, Jiři, Engineers

TITLE: Vacuum degassing of tin bronzes

PERIODICAL: Slévárenství, no. 1, 1960, 33 - 38

TEXT: The author describes the significance of vacuum degassing of Sn bronzes, lists methods and equipment for vacuum degassing and gives results of laboratory tests. Gases, solved in nonferrous alloys are considerably impairing the mechanical quality of the metal. Oxygen is often removed by phosphorus, added in form of a Cu-P prealloy with a content of 10% P (VŽKG combine). However, residual P has a very disadvantageous influence on the mechanical property of the bronze. Degassing is performed either as natural degassing (settling of the melt at lower temperatures, which reduces the solubility of the gases), or as melting in inertial atmosphere (N_2, CO_2) and ventilation of the melt with inertial gas (N_2), or as the so-called oxydizing-reducing process which employs the inverse dependence of H and O solubility in the melt. The most effective degassing method is vacuum melting in electrical induction, eventually arc furnaces, which is so far applied only on a laboratory scale or for special alloys, since it is a very expensive method which

Z/036/60/000/001/002/002
A205/A126

Vacuum degassing of tin bronzes

has the disadvantage that other volatile compounds (Pb, Zn) are also evaporated. Vacuum degassing of melted metals outside of melting furnaces is less expensive and is commonly used in steel production and for degassing of Al alloys and bronzes. The laboratory tests, described in the following, were made with a most simple and inexpensive vacuum equipment, which consists of a steel vessel (335 mm in diameter, 800 mm high) with a removable lid, which holds the pot with the melted sample, and can be evacuated by 2 "LP 120" rotary oil pumps with a total suction output of 240 m^3/hr, producing an average vacuum of 10^{-2} mm Hg. Installed into the piping is a filter with oil-soaked steel chips. The bronze samples were placed in a graphite pot, holding 30 kg, and were melted in a 40 kw furnace. After melting, the pot was placed into the vacuum container, the lid was closed, and the pump started. A total of 28 test charges of Cu-Sn bronze with a content of 10% Sn were prepared in 3 series, according to varying additions of deoxydizing Cu-P prealloy. The composition of the tested bronzes did not change substantially by vacuum degassing. Specific weights of degassed samples were always higher than those of not degassed samples and depend on the amount of residual P. A positive influence on the amount of gas removal is exerted by increasing the degassing time, by lower final pressures, lower temperatures of the melt, lower initial content of gases, and lower

Card 2/3

Vacuum degassing of tin bronzes

Z/036/60/000/[illegible]/[illegible]
A205/A126

contents of P in the melt. Vacuum degassing is generally improving the mechanical qualities of the bronze; however, the negative influence of the P content is dominating. In test series III, where the P content of degassed samples was increased, mechanical properties are inferior to those of non-degassed samples. Vacuum degassed samples were generally more corrosion resisting than non-degassed ones (with the exception of 3 samples tested at 700°C). Based on these tests, a larger station was constructed for vacuum degassing of up to 500 kg Cu alloy in a graphite pot. The station is equipped with 2 rotary oil pumps with a total output of 1,100 m^3/hr. The vacuum chamber is 1,260 mm in diameter and 1,200 mm high. There are 15 figures, 4 tables and 3 references: 1 Soviet-bloc and 2 non-Soviet-bloc.

ASSOCIATION: VZKG Ostrava

Card 3/3

Z/034/61/000/007/006/007
E073/E335

AUTHORS: Myslivec, T., Motloch, Z. and Kuběna, S., Engineers

TITLE: Method of Manufacturing Fine-grain Austenitic Steels (Patent application, Class 18b, 20, PV 809-60, February 6, 1960)

PERIODICAL: Hutnické listy, 1961, No. 7, p. 513

TEXT: The method consists of mixing together open-hearth steel and electrical steel and adding of Al, Ti, B, Zr, V individually or combined. The subject matter of the invention is that these additions, which bring about refining of the austenitic grain of the produced steel, are introduced into the ladle of the electrical steel prior to its being poured into the open-hearth melt or introduced into the stream of the open-hearth steel when this is mixed with the electrically-melted steel. As a result, a uniform and controlled austenitic grain size is obtained with favourable metallurgical properties, which can be manufactured economically.
(Abstracter's note: this is a complete translation.)

Card 1/1

Z/034/61/000/007/007/007
E073/E335

AUTHORS: Myslivec, T., Motloch, Z. and Kubena, S., Engineers

TITLE: Method of Manufacture of High-grade Carbon and Alloy Steels
(Patent application, Class 31c, 12/02, PV 1110-60, February 19, 1960)

PERIODICAL: Hutnické listy, 1961, No. 7, p. 514

TEXT: The melt with the alloying additions and deoxidation alloys is degassed in vacuum and then it is topped up, still under vacuum, with non-deoxidised (rimming) or partly deoxidised steel, or the process is reversed. As a result, steel with a minimum content of non-metallic admixtures and gases is obtained. The specification contains a description of 7 execution examples.
(Abstracter's note: this is a complete translation.)

Card 1/1

MYSLIVEC, Theodor; MOTLOCH, Zdenek; BARTEK, Bretislav

Experience with the production of semi-killed steel for thick plates. Hut listy 17 no.7:462-471 Jl '62.

1. Vitkovicke zelezarny Klementa Gottwalda, Ostrava.

BECVAR, J., inz.; PUNCOCHAR, Zd., inz.; MOTLOCH, Z., inz.; KREJCI, J., inz.; TEINDL, J., prof., dr.

Informations on metallurgy. Hut listy 18 no.2:139-146 F '63.

L 21356-66 EWA(d)/EWP(t) JD

ACC NR: AP6010889 SOURCE CODE: CZ/0034/65/000/008/0558/0562

AUTHOR: Motloch, Zdenek (Engineer); Horejs, Slavomir (Engineer, Candidate of sciences)

ORG: Metallurgical Research Institute Klement Gottwald Vitkovice Iron Works, Ostrava (Vyzkumny ustav metalurgicky VZKG)

41
B

TITLE: Properties of rails made from vacuum degassed steels

SOURCE: Hutnicke listy, no. 8, 1965, 558-562

TOPIC TAGS: tensile strength, steel, wear resistant ferrous metal, toughness, vacuum degassing, carbon steel, chemical composition, metal rolling, fabricated structural metal

ABSTRACT: Vacuum metallurgy 16 offers both a better quality product and a more economical production method. Rails made from degassed steel and air-cooled after rolling show an improved tensile strength, higher toughness, and better wear resistance than rails made from ordinary steel and cooled slowly in pits. Certain differences found in the properties of samples taken from various spots in a single billet are explained by changes in chemical composition in the respective parts of the billet. Practical experience with the rails shows that double the length of life can be expected from these rails than from those made from carbon steel that was not degassed. Orig. art. has: 6 figures and 5 tables. [JPRS]

SUB CODE: 13, 11, 07 / SUBM DATE: none / ORIG REF: 003 / SOV REF: 001

UDC: 669-424; 669.188

Card 1/1 *90*

L 34159-66 EWP(t)/ETI IJP(c) JD

ACC NR: AP6026035 SOURCE CODE: CZ/0034/66/000/003/0164/0168

AUTHOR: Motloch, Zdenek (Engineer); Hyslivec, Theodor (Engineer; Candidate of sciences); Bartek, Bretislav (Engineer)

ORG: Klement Gottwald Vitkovice Iron Works, Ostrava (Vitkovicke zelezarny KG)

TITLE: Facts about manufacture of semikilled steels for strips

SOURCE: Hutnicke listy, no. 3, 1966, 164-168

TOPIC TAGS: steel, metallurgic furnace, rimmed steel, shot blasting, metal casting, metallurgic process, metallurgic industry

ABSTRACT: The steel is made in a 70 t fixed open hearth and a 250 t tilting furnace by a process commonly used for rimming steels. Deoxidation was carried out by Al shot addition during the bottom casting process, about 1-1.5 minutes before the end of casting; 3½ to 4¼ t ingots were cast. Blooms were tested ultrasonically to determine optimum amount of Al. The homogeneous surface layer is 20-30 mm at the bottom, 15-20 mm at the top. 50-90% of occluded substances are aluminates. The improved process of deoxidation reduced drastically the amount of substandard product. The proportion of semikilled steel strip increased from 20.4% in 1962 to 54.8% in 1965. The amount of substandard product was lower in semikilled steel production than in rimming steel. Orig. art. has: 13 figures and 3 tables. [Based on author's Eng. abst.] [JPRS: 36,646]

SUB CODE: 11, 13, 05 / SUBM DATE: none / ORIG REF: 004

Card 1/1

UDC: 669.141.241.3

MOTLOKHOV, V.P.

Adapting the circular lastex machine to the production of lastex for socks made on flat knitting machines. Obm.tekh.opyt. [MLP] no.36:27-29 '56. (MIRA 11:11)
(Knitting machines) (Elastic fabrics)

ACC NR: AP6027231 SOURCE CODE: UR/0109/66/011/008/1362/1368

AUTHOR: Motlokhov, V. V.

ORG: none

TITLE: Optimal and suboptimal filtration of space signals

SOURCE: Radiotekhnika i elektronika, v. 11, no. 8, 1966, 1362-1368

TOPIC TAGS: radar, radar signal processing, radar antenna

ABSTRACT: By using the theory of spatial-frequency spectra, the problem of accurate representation of extended targets of a certain class is reduced to the well-known problem of synthesizing a radar antenna for optimal (minimum mean-square error) filtration of spatial signals of $f(x)$ or $|f(x)|^2$ type specified by their correlation functions. As the exact solution would require an infinitely long antenna, a suboptimal filtration is examined which requires only a finite-length

Card 1/2 UDC: 621.391.172

ACC NR: AP6027231

antenna. The latter solution is illustrated by an example in which the spatial signal and seaclutter noise are specified and the minimum of reproduction-error dispersion is employed as an optimality criterion. The formulas deduced in the article can be extended over the case of a two-dimensional problem. Optimization of a (self-tuning) radar antenna for various spatial signals with an allowance for signal-to-noise ratio is held, in principle, feasible. Orig. art. has: 4 figures and 25 formulas.

SUB CODE: 17, 09 / SUBM DATE: 09Apr65 / ORIG REF: 005

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