COUNTRY : Czechoslovakia
CATEGORY : G-2

ABS. JOUR. : RZKhim., No. 16 1959, No. 57137

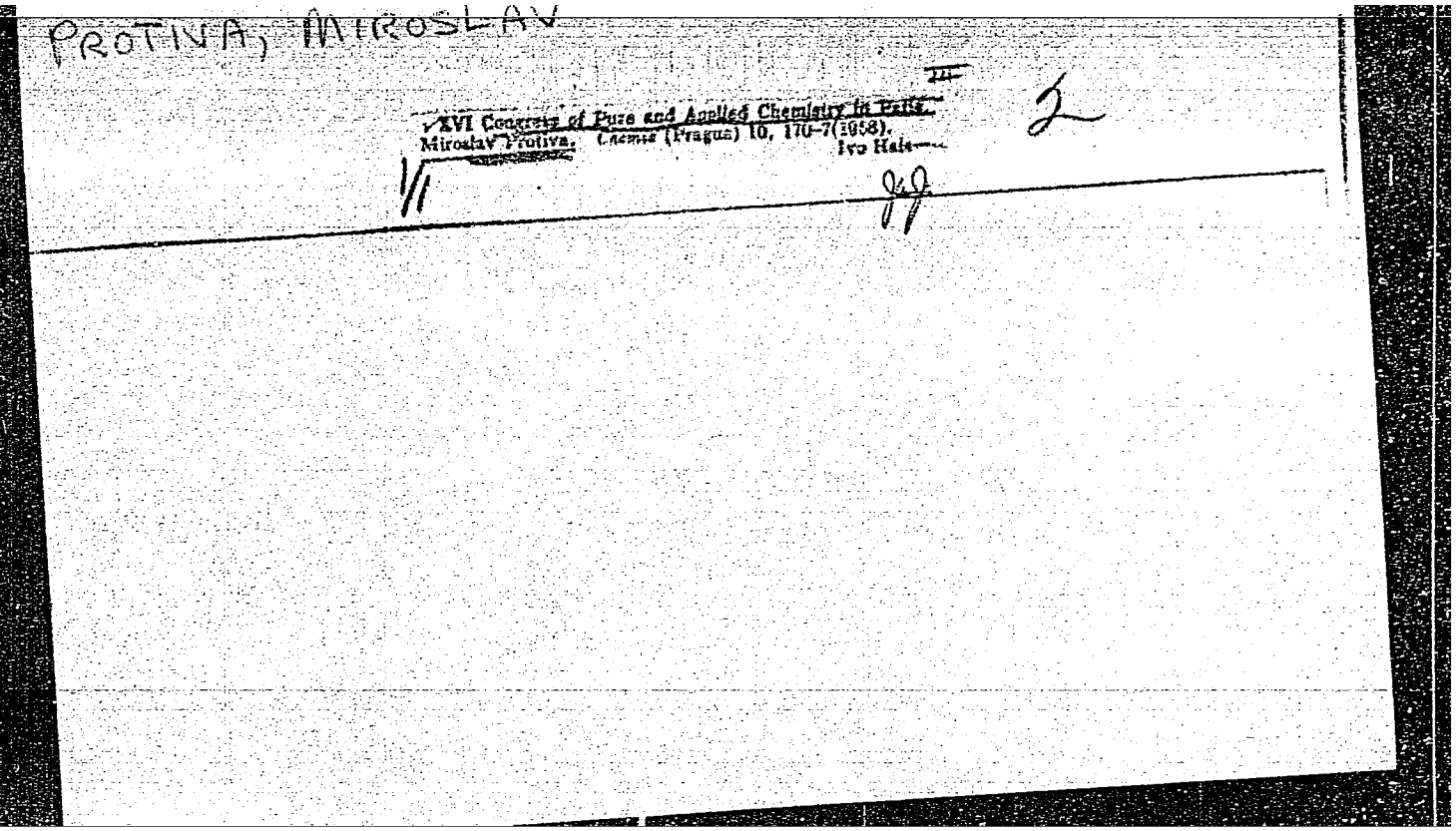
AUTHOR :
INST. :
TITLE :

ORIG. PUB. :

ABSTRACT : is allowed to stand 12 hrs at the end of which period 4 gms of $2II \cdot H_2SO_4 \cdot H_2O$ are obtained, mp 128-132° (corr; from water). For Communication XLIII see RZhKhim, No 14, 1959, 49483.

P. Sokov

CARD: 4/4



PROTIVA, MIROSLAV

XVI Congress of Pure and Applied Chemistry in Paris.
Miroslav Protiva. Chemie (Prague) 10, 170-7(1958).
Ivo Hais

PROTIVA, M.

"Winter meeting of the Swiss Chemical Society in Zurich."

p. 522 (Chemie, Vol. 10, no. 6, June 1958, Praha, Czechoslovakia)

Monthly Index of East European Accessions (EEAI) LC, Vol. 7, no. 9, September 1958

CZECHOSLOVAKIA / Organic Chemistry. Synthetic Organic Chemistry. G-2

Abs Jour: Ref Zhur-Khimiya, No 23, 1958, 77579.

Author : Novak, L. and Protiva, M.
Inst : Not given.
Title : Syntheses of Estrogens. XI. On the Chemistry of Derivatives of 5-methoxyindianone and 4-methoxyindianone. XII. ζ-phenyl- γ-methoxybutyric Acid.

Orig Pub: Collect Czechoslov Chem Commun, 23, No 4, 663-672 (1958), 673-680 (in German with a Russian summary).

Abstract: See RZhKhim, 1957, 71596 and 71597.

Card 1/1

5

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

Abs Jour: Ref Zhur-Khim., No 24, 1958, 81760.

Author : Adlerova E., Novak L., Protiva M., Jilek J., Protiva M.
Inst :
Title : The Synthesis in the Group of Estrogenic Hormones. XIV. 2-Substituted Derivatives of 3-Methyl Cyclohexanone Carbonic Acid . XV. The Reaction of Phenylacetylenes with Substituted Cyclohexanones. A New Complete Synthesis of One of the Racemic Doisynolic Acids.

Orig Pub: Collect, czechosl. chem. commun., 1958, 23, No 4, 681-691; 692-703.

Abstract: See R.Zh. Khim., 1958, 11219, 54013.

Card : 1/1

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

Abs Jour: Ref Zhur-Khimiya, No 23, 1958, 77835.

Author : Pliml, J., Borovicka, M., and Protiva, M. and Protiva, M., Borovicka, B., Cimler, L., and Sedivy, Z.

Inst : Not given.

Title : Synthetic Analogs of the Curare Alkaloid. VI. Some Notes on the Preparation of Tris-2-diethyl-aminoethyl) Ether of Pyrogallol. VII. Two New Models for Tubocurare and Two Bis-quaternary Ammonium Salts.

Orig Pub: Soll Czech Chem Commun, 23, No 4, 704-711, 712-719 (1958) (in German with a Russian summary).

Abstract: See RZhKhim, 1957, 51218; 1958, 4777.

Card 1/1

CZECHOSLOVAKIS / Organic Chemistry. Synthesis. G

Abs Jour: Ref Zhur-Khimiya, No 7, 1959, 23411

Author : Borovicka, M.; Protiva, M.
Inst : Not given
Title : Antihistaminic Substances. XLI. Derivatives of 1-Aza-2,3-5,6-Dibenzocycloheptadiene (Homoacridan).

Orig Pub: Collect. czechosl. chem. commun., 1958, 23, No 7, 1330-1335.

Abstract: See RZhKhim, 1958, 43415.

Card 1/1

G

Country : Czechoslovakia
Category : Organic Chemistry. Synthetic Organic Chemistry

Jour. : Ref Zhur-Khimiya, No.12, 1959, No. 42353

Author : Hoch, V.; Protiva, M.
Institut. : Not given.
Title : Research on Synthesis of Estrogenic Hormones. VI. Synthesis of Hydrindane-1,4-dione.

Orig. Pub. : Collect. czechosl. chem.commun., 1958, 23, No.10, 1901-1[illegible].

Abstract : No abstract.
See Ref Zhur-Khimiya, 1958, No.19, 64393

Card: 1/1

G-2

45688

Country : Czechoslovakia
Category :

Abs. Jour :

Author : Hach, V. and Protiva, M.
Institut. : Not given
Title : Antihistamine Compounds. XLII. Derivatives of 1-Aza-4-thia-2,3-5,6-dibenzocycloheptadiene (Homophenothiazine)

Orig Pub. : Collection Czechoslov Chem Commun, 23, No 10, 1941-1946 (1958); Chem Listy, 51, 1909 (1957)

Abstract : See RZhKhim, No 23, 1958, 77702.

Card: 1/1

3-3

COUNTRY : Czechoslovakia
CATEGORY :
17957

ABS. JOUR. : RZKhim., No. 5 1960, No.

AUTHOR : Vejdelek, Z. J. and Protiva, M.
INST. : Not given
TITLE : Compounds Which Block the Sympathetic Ganglia. VII Derivatives of 2-Aminoisocampnane.

SOURCE : Chem Listy, 52, No 12, 2370-2377 (1958)

ABSTRACT : The preparation of amides of 2-aminoisocamphane (I), 2-methylaminoisocamphane (II), and 2-dimethylaminoisocamphane (III) and of their reduction products, N-substituted 2-methylaminoisocamphanes, is described. A mixture of 1.4 gm I and 1 gm $HCONH_2$ is heated for 4 hrs at 130° followed by heating for 30 min at 145-150° to give 2-formylaminoisocamphane (IV), yield 0.75 gm. To a solution of 228 gms D-camphene (V) in 405 ml CH_3COOH, 84 ml of conc H_2SO_4 are added with cooling, followed by the

186

CARD: 1/10

G-5

COUNTRY : Czechoslovakia
CATEGORY :

17957

ABS. JOUR. : RZKhim., No. 5 1960, No.

AUTHOR :

TITLE :

ORIG. PUB. :

ABSTRACT : addition of 252 gms of powdered NaCN at 5°, after which a mixture of 500 ml H_2SO_4 and 304 ml CH_3COOH is added over 5 hrs at 5°; the resulting mixture is allowed to stand 48 hrs at 20° and poured over 9 kgs of ice, neutralized with 20% NaOH, and extracted with ether. The extract is rinsed successively with 5% HCl, 10% Na_2CO_3, and water. Distillation of the ether gives crude IV (256.5 gms) which contains about 35% of the starting V and requires furtner purification. Application of a

CARD: 2/10

G-5

COUNTRY : Czechoslovakia
CATEGORY :
ABS. JOUR. : RZKhim., No. 5 1960, No.

AUTHOR :
INST. :
TITLE :

ORIG. PUB. :

ABSTRACT : similar procedure gives 143 gms of crude IV from 136 gms L-V. The reduction of 2-nitroisocamphane with Na in alcohol gives I, mp 182-184° (distillation), $[\alpha]^{20}D$ + 2° (alc), picrate mp 222° (from alc); the hydrochloride derivatives melts above 350°. A mixture of 3.1 gms crude IV, 25 ml 10% NaOH, and 25 ml alcohol is heated for 40 hrs: a yield of 5.2 gms I is obtained. The reduction of 0.75 gm IV with 0.5 gm $LiAlH_4$ in ether gives DL-2-methylaminoisocamphane (DL-VI), hydrochloride mp

137

CARD: 3/10

G-3

COUNTRY : Czechoslovakia
CATEGORY :
ABS. JOUR. : RZKhim., No. 5 1960, No. 17957
AUTHOR :
INST. :
TITLE :

ORIG. PUB. :

ABSTRACT : 251° (from isopropyl alcohol-ether). The reaction of DL-VI with $Br(CH_2)_5Br$ instead of the corresponding diamine gives only the hydrobromide of DL-VI, mp 247° (from alc-ether). The analogous reduction of IV (obtained from D-V) gives D-VI, bp 70-72°/1-1.5 mm, $n^{20}D$ 1.4835, $[\alpha]^{20}D$ +3° (c = 1; alc), hydrochloride mp 294-295° (decomp; from iso-C_3H_7OH-ether), picrate mp 167° (from 60% alc). L-VI is similarly prepared from IV (obtained from L-V), yield 49%, bp 78°/5 mm, $n^{20}D$ 1.4868, $[\alpha]^{20}D$

CARD: 4/10

G-3

17957

COUNTRY : Czechoslovakia
CATEGORY :
ABS. JOUR. : RZKhim., No. 5 1960, No.
AUTHOR :
INST. :
TITLE :

ORIG. PUB. :

ABSTRACT : -3° (c = 1; alc), hydrochloride mp 251° (decomp; from iso-C_3H_7-ether), picrate mp 191° (decomp; from aqueous alc). When D- and L-VI are mixed in equivalent amounts, DL-VI is obtained, $n^{20}D$ 1.4856, hydrochloride mp 247-248.5° (from iso-C_3H_7OH-ether). The methylation of DL-I by heating for 8 hrs with a mixture of 93% HCOOH and 30% HCOH at 95-105°, gives DL-2-dimethylaminoisocamphane (DL-VII), yield 59%, bp 64-65°/0.4-0.5 mm, 70-71°/2 mm, $n^{20}D$ 1.4865, hydrochloride mp 167-70° (from acetone), iodometh-

CARD: 5/10

188

G-3

COUNTRY : Czechoslovakia
CATEGORY :

17957

ABS. JOUR. : RZKhim., No. 5 1960, No.

AUTHOR :
INST. :
TITLE :

ORIG. PUB. :

ABSTRACT : ylate mp 187° (from acetone-ether). DL-VII is similarly prepared by the methylation of DL-VI, yield 76%. The reaction of DL-VII with $Br(CH_2)_5Br$ gave only the hydrobromide, mp 177-178° (decomp; from alc-ether). Attempts to obtain the quaternary salt from DL-VII and $I(CH_2)_4I$ in acetone gave only the hydroiodide of VII, mp 207-208° (from alc-ether). The methylation of D-VI with a mixture of HCOOH and HCOH gives D-VII, mp 170-172° (from acetone), picrate mp 180° (from aqueous alc). A

CARD: 6/10

G-3

17957

COUNTRY : Czechoslovakia
CATEGORY :
ABS. JOUR. : RZKhim., No. 5 1960, No.
AUTHOR :
INST. :
TITLE :

ORIG. PUB. :

ABSTRACT : solution of 5.6 gms $ClCH_2COCl$ in 20 ml C_6H_6 is added dropwise to a solution of 16.7 gms VI in 45 ml C_6H_6, the resulting solution is stirred for 2 hrs, allowed to stand 12 hrs, the hydrochloride of VI is filtered off, and the filtrate is rinsed with 1 N HCl, 10% Na_2CO_3, and water, dried, and evaporated to give 11 gms 2-(N-chloroacetyl-N-methylamino)-iso-camphane, bp 143-145°/0.5 mm, which on standing for 24 hrs in benzene with $NH(CH_3)_2$ after the usual treatment gives 2-(N-dimethylaminoacetyl-N-methyl-

189

CARD: 7/10

G-3

17957

COUNTRY : Czechoslovakia
CATEGORY :
ABS. JOUR. : RZKhim., No. 5 1960, No.
AUTHOR :
INST. :
TITLE :

ORIG. PUB. :

ABSTRACT : amino)-isocamphane (VIII), yield 91%, bp 140°/0.5 mm, hydrochloride mp 198-200° (from acetone). A benzene solution of the acyl chloride of nicotinic acid is mixed with a benzene solution of VI, the mixture is refluxed for 4 hrs, suction-filtered for the removal of the hydrochloride of VI, and treated in the usual way to give crude 2-(N-nicotonyl-N-methylamino)-isocamphane (IX), yield 85%, which could not be vacuum distilled without decomposing: picrate mp 160° (from ale). A similar

CARD: 8/10

G-5

17957

COUNTRY : Czechoslovakia
CATEGORY :
ABS, JOUR. : RZKhim., No. 5 1960, No.

AUTHOR :
INST. :
TITLE :

ORIG. PUB. :

ABSTRACT : procedure applied to a mixture of VI and ClCO(CH$_2$)$_3$-COCl in C$_6$H$_6$ (20°, 24 hrs) gives the bis-(N-2-isocamphyl-N-methyl)-amide of glutaric acid (X), yield 92%, which was used unpurified in subsequent work. The reduction of VIII with LiAlH$_4$ in ether gives 2-(N-dimethylaminoethyl-N-methylamino)-isocamphane (XI), yield 91%, bp 107-108°/1 mm, picrate mp 202-203° (from alc), monoiodomethylate mp 210° (from alc-ether). Similarly 5 gms IX give 5.4 gms 2-(N-3-picolyl-N-methylamino)-isocamphane (XII),

190

CARD: 9/10

G-3

17957

COUNTRY : Czechoslovakia
CATEGORY :
ABS. JOUR. : RZKhim., No. 5 1960, No.
AUTHOR :
INST. :
TITLE :

ORIG. PUB. :

ABSTRACT : bp 156-158°/1-2 mm, and 7.7 gms X give 6.7 gms N, N'-bis-(2-isocamphyl)-N,N'-dimethylpentamethylene-diamine (XIII), bp 218-220°/1 mm, dihydrochloride (semihydrate) mp 203-205° (from alc-ether), di-iodomethylate (semihydrate) mp 178-179° (decomp; from acetone). I-XIII are effective ganglia-blocking agents and exhibit anti-hypotonia activity. The IR-spectra of the hydrochloride of bornylamine and L-I, DL-II, and DL-III are given. For Communication VI see RZhKhim, 1959, No. 3, 8246.

A. Emr

CARD: 10/10

G

Country : CZECHOSLOVAKIA
Category: Organic Chemistry. Natural Compounds and Their Synthetic Analogues

Abs Jour: RZhKhim., No 17, 1959, No. 61026

Author : Protiva, M.; Jilek, J.O.; Hachova, Ye.; Novak, L.*
Inst : -
Title : Synthetic Models of Alkaloids Lowering Blood Pressure. I. 1-Aralkyl-1, 2, 3, 4-Tetrahydronorgarmans. II. Simple Models of "Reserpine" With Cyclohexane Rings E.

Orig Pub: Collect. Czechosl. Chem. Communs, 1959, 24, No 1, 74-82, 83-92

Abstract: See Ref. Zhur-Khimiya, 1958, No 18, 61101, No 22, 74167

*Vejdelek, Z.J.; Adlerova, E. II. Protiva, M.; Jilek, J.O.; Hach, V.; Adlerova, E.; Mychajlyszyn, V.

Card : 1/1

COUNTRY : Czechoslovakia
CATEGORY :

ABS. JOUR. : RZKhim., No. 5 1960, No. 17904

AUTHOR : Protiva, M. and Hach, V.
INST. : Not given
TITLE : Antihistamine Compounds. XLV. Homophenothiazine Analogs of Chloropromazine and Some Related Compounds.

ORIG. PUB. : Collection Czechoslov Chem Commun, 24, No 1, 207-211 (1959)

ABSTRACT : The authors report the synthesis of 2-chlorohomophenothiazine (I, R = H) and of a number of its derivatives (Ia-e, where Ra = $(CH_2)_3N(CH_3)_2$, Rb = $COCH_2Cl$, Rc = $COCH_2CH_2Cl$, Rd = $COCH_2N(C_2H_5)_2$, and Re = $COCH_2N(CH_2)_5$) possessing antihistamine, local anesthetic, and mildly hypothermic actions. The Na salt of the methyl ester of thiosalicylic acid (obtained from 16.5 gms of the ester and 2.3 gms Na in 150 mg [sic] CH_3OH) is refluxed for 6 hrs with the addition of a solution of 19.2 gms 2,5-

CARD: 1/6

U-2

COUNTRY : Czechoslovakia
CATEGORY :

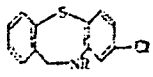
17904

ABS. JOUR. : RZKhim., No. 5 1960, No.

AUTHOR :
INST. :
TITLE :

ORIG. PUB. :

ABSTRACT : dichloronitrobenzene in 50 ml CH_3OH to give the methyl ester of 2'-nitro-4'-chlorodiphenylsulfide-2-carboxylic acid (yield 84%, mp 81° (from CH_3OH), which on reduction (16.1 gms) over Raney Ni (2 gms)



CARD: 2/6

G-2

COUNTRY : Czechoslovakia
CATEGORY :
17904

ABS. JOUR. : RZKhim., No. 5 1960, No.

AUTHOR :
INST. :
TITLE :

ORIG. PUB. :

ABSTRACT : in alcohol (150 mg [sic]) at about 20° and atmospheric pressure gives the methyl ester of 2'-amino-4'-chlorodiphenylsulfide-2-carboxylic acid (II), yield 70%, mp 137° (from CH_3OH), acetyl derivative mp 151° (from alc). II on heating (220-230°, 8 hrs) cyclizes to give the lactam of 2'-amino-4'-chlorodiphenylsulfide-2-carboxylic acid (III), yield 24.2 gms, mp 290° (from CH_3COOH). Reduction of the methyl ester of 2', 4'-dinitrophenylsulfide-2-carboxylic acid analogously to II gives the methyl ester of 2',4'-diaminodiphenyl-

CARD: 3/7

G-2

17904

COUNTRY : Czechoslovakia
CATEGORY :
ABS. JOUR. : RZKhim., No. 5 1960 No.
AUTHOR :
INST. :
TITLE :

ORIG. PUB. :

ABSTRACT : sulfide-2-carboxylic acid (IV), yield 97%, mp 119° (from alc), diacetyl derivative mp 184° (from alc). Attempts to effect the thermal cyclization of IV to III gave only an amorphous product of polymeric nature. The reduction of 2.7 gms III (0.7 gm $LiAlH_4$, 100 ml abs ether, 16-hr reflux, hydrolysis with 20 ml 40% NaOH) gives I, yield 88%, mp 127° (from alc), hydrochloride derivative mp 179° (from alc). A mixture of 10 gms I, 7.5 gms 3-dimethylaminopropyl chloride and 2 gms $NaNH_2$ in 100 ml

176

CARD: 4/7

COUNTRY : Czechoslovakia
CATEGORY :

17904

ABS. JOUR. : RZKhim., No. 5 1960, No.

AUTHOR :
INST. :
TITLE :

ORIG. PUB. :

ABSTRACT : xylene is refluxed for 5 hrs to give Ia, yield 6.5 gms, bp 195-198°/0.5 mm, picrate mp 180° (from alc), hydrobromide mp 166°. 10 gms I are refluxed (12 hrs) with 16.7 gms ClH_2COCl in 60 ml C_6H_6 (or with 7.5 gms ClH_2CCH_2COCl in 70 ml C_6H_6) to give Ib, yield 91%, mp 140° (from alc), or Ic, yield 52%, mp 128-129° (from alc). A solution of 5.5 gms Ic and 20 ml diethylamine in 75 ml benzene is refluxed for 10 hrs, the diethylamine hydrochloride which is precipitated is separated, the filtrate

CARD: 5/7

G-2

COUNTRY : Czechoslovakia
CATEGORY :

17904

ABS. JOUR. : RZKhim., No. 5 1960 No.

AUTHOR :
INST. :
TITLE :

ORIG. PUB. :

ABSTRACT : is extracted with 10% HCl, and the extract is made alkaline with NaOH and extracted with ether to give Id, yield 8.5 gms, mp 106° (from alc), picrate mp 204° (from alc), hydrochloride mp 187° (from alc). Using a procedure similar to that applied for Id, 2.4 gms of crude Ic are obtained from 3.2 gms Ib and 6 ml piperidine in 50 ml benzene; the crude product is converted directly to the picrate, mp 230° (from alc). All mp's were determine by the Kofler method and corrected.

CARD: 6/7 177

G-2

COUNTRY : Czechoslovakia
CATEGORY :

ABS. JOUR. : RZKhim., No.5 1960, No. 17904

AUTHOR :
INST. :
TITLE :

ORIG. PUB. :

ABSTRACT : For Communication XLIV see RZhKhim, 1959, No 16, 57137.

A. Emr

CARD: 7/7

G-2

COUNTRY : Czechoslovakia
CATEGORY :

17842

ABS. JOUR. : RZKhim., No. 5 1960, No.

AUTHOR : Adlerova, E. and Protiva, M.
INST. : Not given
TITLE : Parasympathomimetic Agents. II. 1-Methyl-4-Acyl-hydroxypenthiophanium Salts.

ORIG. PUB. : Collection Czechoslov Chem Commun, 24, No 4, 1268-1273 (1959)

ABSTRACT : The reaction of 4-penthiophanol (I) with acid anhydrides or acyl chlorides gives a series of esters having the general formula $CH_2CH_2CH(OCOCHR'R'')$ $-CH_2CH_2S$ [sic] (IIa-d, where R'a = R''a = H; R'b = H, R''b = CH_3; R'c = R''c = C_6H_5; R'd = C_6H_5, R''d = cyclohexyl), from which the corresponding iodomethylates (IIIa-d) have been prepared. IIIa and IIIb were found to possess parasympathomimetic action, while IIIc and IIId were found to possess spasmolytic action. $CH_3OOCCH_2CH_2S^+(CH_3)_2I^-$ (IV)

CARD: 1/7

G-2

17842

COUNTRY : Czechoslovakia
CATEGORY :
ABS. JOUR. : RZKhim., No. 5 1960, No.
AUTHOR :
INST. :
TITLE :

ORIG. PUB. :

ABSTRACT : exhibits a marked parasympathomimetic activity. The methyl ester of β,β'-thiodipropionic acid (V) wasobtained by the addition of H_2S to the methyl ester of acrylic acid (cf. E. A. Fehnel and M. Carmack, Org Syntheses, 30, 65, (1950)), yield 93%, bp 148-150°/10 mm. The cyclization of V according to Dikman gives the methyl ester of 4-penthiophanone-3-carboxylic acid, yield 65%, bp 115-120°/2 mm, which on hydrolysis and decarboxylation (cf. E. A. Fehnel and M. Carmack, J Amer

CARD: 2/7

G-2

17842

COUNTRY : Czechoslovakia
CATEGORY :
ABS. JOUR. : RZKhim., No. 5 1960, No.
AUTHOR :
INST. :
TITLE :

ORIG. PUB. :

ABSTRACT : Chem Soc, 70, 1823 (1948)) is converted to 4-penthiophanone (VI), yield 82%, mp 56-60°. The reduction of VI with $LiAlH_4$ in ether, first at 20° followed by boiling for 10 min and the usual treatment gives I, yield 82%, bp 84-85°/1.3 mm, mp 48-49° (from petroleum ether), p-nitrobenzoate mp 111° (from 90% alc), p-toluenesulfonate mp 90-91° (from CH_3OH), iodomethylate of the p-toluenesulfonate mp 134° (decomp; from alc). IIa is synthesized from I and $(CH_3CO)_2O$ on standing for 24 hrs in pyri-

CARD: 3/7

COUNTRY	: Czechoslovakia	G-2
CATEGORY	:	
ABS. JOUR.	: RZKhim., No. 5 1960, No.	17842
AUTHOR	:	
INST.	:	
TITLE	:	
ORIG. PUB.	:	

ABSTRACT : dine at 26°, yield 81%, bp 91°/8 mm; IIIa mp 129° (Kofler block, decomp: from CH_3CH). Following a procedure similar to that used for IIa, IIb is synthesized by heating a pyridine solution of I with propionic acid anhydride for 3 hrs at about 100°, yield 84.5%, bp 102°/9 mm; IIIb mp 116-118° (Kofler block, decomp; from CH_3OH). When a benzene solution of the acyl chloride of diphenylacetic acid is added dropwise to a boiling solution of I, the resulting solution is refluxed for 1.5 hrs.

CARD: 4/7 166

G-2

17842

COUNTRY: Czechoslovakia
CATEGORY :
ABS. JOUR. : RZKhim., No. 5 1960, No.
AUTHOR :
TITLE :
ORIG. PUB. :

ABSTRACT : and the C_6H_6 is distilled off, IIc is obtained, yield 76%, bp 174-175°/0.4 mm, mp 51-52° (from petroleum ether-ether, 4 : 1); IIIc mp 147-148° (decomp; from CH_3OH). Using an analogous procedure, IId is synthesized from the acyl chloride of phenylcyclohexylacetic acid, yield 74%, bp 180-184°/0.4mm, mp 85-86° (from petroleum ether); IIId mp 101-102° (decomp; from alc-ether). The addition of a solution of 44.5 gms $SOCl_2$ in 107 ml $CHCl_3$ to a solution of 29.5 gms I in 75 ml $CHCl_3$

CARD: 5/7

COUNTRY : Czechoslovakia G-2
CATEGORY :

ABS. JOUR. : RZKhim., No. 5 1960, No. 17842

AUTHOR :
INST. :
TITLE :

ORIG. PUB. :

ABSTRACT : and 32.5 gms anhydrous pyridine, followed by heating of the reaction mixture for 45 min at about 100° and the usual treatment of the chloroform layer gives impure 4-chloropentniopnane (VII), bp 52-57°/1 mm. The reaction of VII with the Na-salts of benzilic and hexahydrobenzilic acids in boiling alcohol did not give the corresponding esters. When an acetone solution of the methyl ester of β-chloropropionic acid is added to a suspension of CH_3SNa in acetone and the solution refluxed for

CARD: 6/7

G-2

17842

COUNTRY : Czechoslovakia
CATEGORY :
ABS. JOUR. : RZKhim., No. 5 1960, No.
AUTHOR :
INST. :
TITLE :

ORIG. PUB. :

ABSTRACT : 7 hrs, methyl-2-carbomethoxyethylsulfide is obtained, yield 50%, bp 170-180°; IV mp 91-93° (from alc). For Communication I see RZhKhim, 1954, No 12, 30565.

A. Emr

CARD: 7/7

MYCHAJLYSZYN,V.; PROTIVA,M.

Antihistamine substances. XLVI. Derivatives of 2,3,6,7,-dibenzo-suberane. Coll Cz chem 25 no.12:3944-3965 '59. (EEAI 9:6)

1. Forschungsinstitut fur Pharmazie und Biochemie, Prag.
(Antihistamines)

NOVAK,L.; PROTIVA,M.

Antihistamine substances. XLVII. Mephenhydramine derivatives substituted in the p- and m-positions. Coll Cz chem 25 no.12: 3966-3977 '59. (EEAI 9:6)

1. Forschungsinstitut fur Pharmazie und Biochemie, Prag.
(Antihistamines)

PROTIVA,M.; VEJDELEK,Z.J.; JILEK,J.O.; MECEK,K.

Synthetic models of hypotensive alkaloids. V. Some additional derivatives of tryptamin and 1,2,3,4,-tetrahydronorharman. Coll Cz chem 25 no.12:3978-3987 '59. (EEAI 9:6)

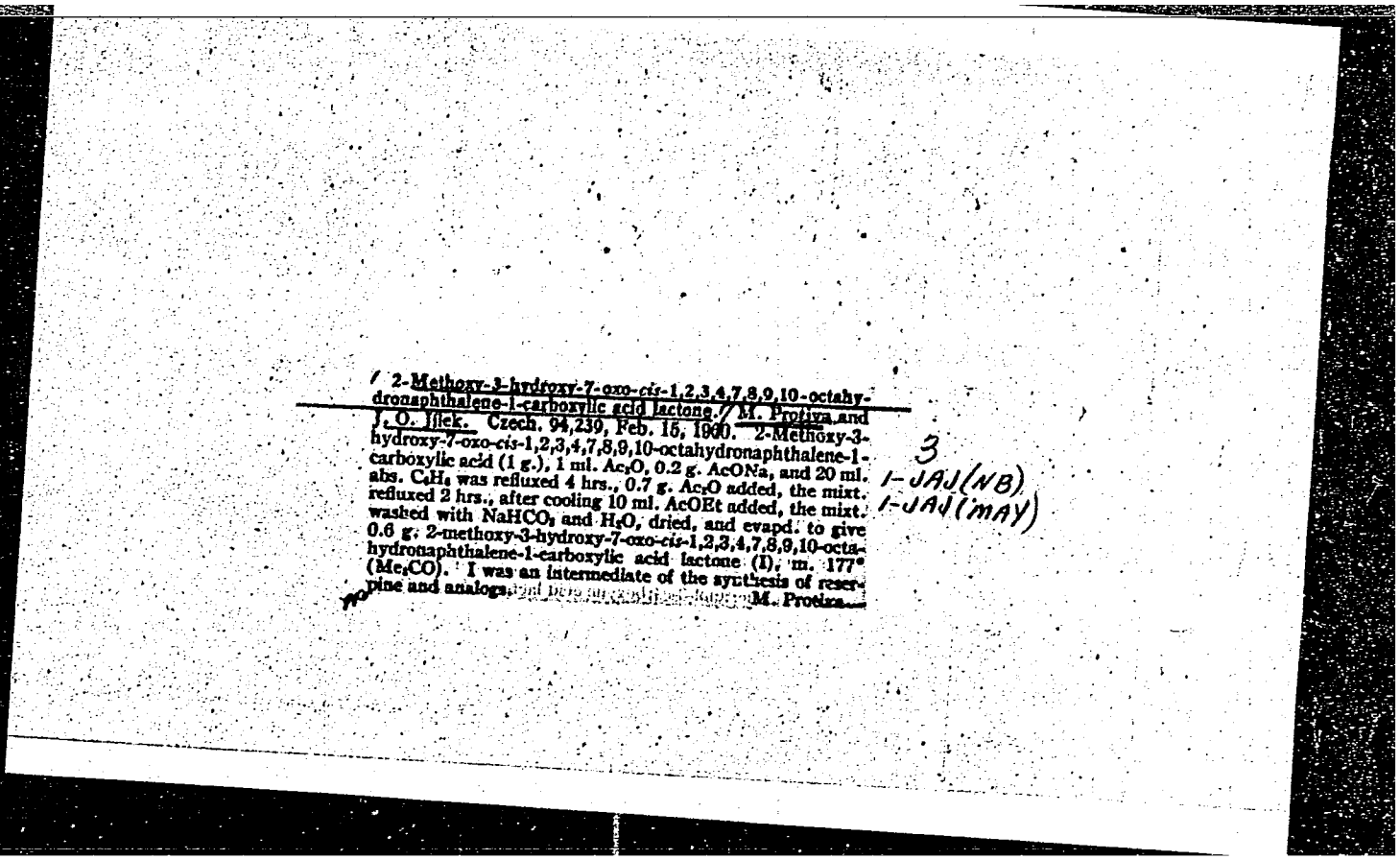
1. Forschungsinstitut fur Pharmazie und Biochemie, Prag.
(Alkaloids) (Hypotension) (Aminoethylindole)
(Tetrahydropyridindole) (Tetrahydronorharman)

PROTIVA, M.

3,5-Epoxy-8-hydroxy-*cis*-3,4,5,8,9,10-hexahydronaphthalene-1-carboxylic acid lactone. M. Protiva and M. Raitner. Czech. 94,236, Feb. 15, 1960. 2-Bromo-3,5-epoxy-8-hydroxy-*cis*-1,2,3,4,5,8,9,10-octahydronaphthalene-1-carboxylic acid lactone (8.6 g.), 75 ml. C_6H_6 and 18 ml. *s*-collidine (I) was refluxed 15 min. After cooling the HBr salt of I was filtered off, the C_6H_6 soln. washed with dild. HCl, with H_2O, and evapd. *in vacuo* to give 5.1 g. 3,5-epoxy-8-hydroxy-*cis*-3,4,5,8,9,10-hexahydronaphthalene-1-carboxylic acid lactone (II), m. 124° (EtOH). II was an intermediate in the synthesis of reserpine. M. Protiva

2-Methoxy-3,5-epoxy-8-hydroxy-*cis*-1,2,3,4,5,8,9,10-octahydro-naphthalene-1-carboxylic acid lactone. M. Protiva and M. Raitner. Czech. 94,237, Feb. 15, 1960. 2,3-Dibromo-5,8-dihydroxy-*cis*-1,4,5,8,9,10-hexahydronaphthalene-1-carboxylic acid 1,8-lactone was dissolved in MeONa, prepd. from 30 mg. Na and 3 ml. abs. MeOH, left overnight at room temp., acidified with 20% HCl, evapd. to dryness and extd. with $CHCl_3$. The soln. filtered, evapd. and the residue mixed with MeOH and Et_2O gave 2-methoxy-3,5-epoxy-8-hydroxy-*cis*-1,2,3,4,5,8,9,10-octahydronaphthalene-1-carboxylic acid lactone (I), m. 101–3°. I was an intermediate in the synthesis of reserpine. M. Protiva

3
1-JAJ(NB)
1-JAJ(MAY)



2-Methoxy-3-hydroxy-7-oxo-*cis*-1,2,3,4,7,8,9,10-octahydronaphthalene-1-carboxylic acid lactone. M. Protiva and J. O. Jilek. Czech. 94,239, Feb. 15, 1960. 2-Methoxy-3-hydroxy-7-oxo-*cis*-1,2,3,4,7,8,9,10-octahydronaphthalene-1-carboxylic acid (1 g.), 1 ml. Ac_2O, 0.2 g. AcONa, and 20 ml. abs. C_6H_6 was refluxed 4 hrs., 0.7 g. Ac_2O added, the mixt. refluxed 2 hrs., after cooling 10 ml. AcOEt added, the mixt. washed with $NaHCO_3$ and H_2O, dried, and evapd. to give 0.6 g. 2-methoxy-3-hydroxy-7-oxo-*cis*-1,2,3,4,7,8,9,10-octahydronaphthalene-1-carboxylic acid lactone (I), m. 177° (Me_2CO). I was an intermediate of the synthesis of reserpine and analogs. M. Protiva

3
1-JAJ(NB)
1-JAJ(MAY)

JILEK, J.O.; PROTIVA, M.

Synthetic experiments in the group of estrogenic hormones. XIX. Wagner-Meerwein arrangement of 1-methyl-2-ethylcyclehexylcarbinol and its analogue in the octahydrophenanthrene series. Coll Cz Chem 25 no.1:165-179 Ja '60. (EEAI 9:12)

1. Forschungsinstitut fur Pharmazie und Biochemie, Prag.
(Estrogenic hormones)
(Rearrangements)
(Ethylmethylcyclohexanemethanol)
(Octahydrophenanthrene)

ADLEROVA, E.; BLAHA, L.; BOREVICKA, M.; ERNEST, I.; JILEK, J.O.; KAKAC, B.; NOVAK, L.; RAJSNER, M.; PROTIVA, M.

Synthetic experiments in the group of hypotensive alkaloids. VI. Some notes on the preparation of alicyclic components in the synthesis of compounds of the reserpine type. Coll Cz Chem 25 no.1: 221-236 Ja '60. (EEAI 9:12)

1. Forschungsinstitut fur Pharmazie und Biochemie, Prag.
(Alkaloids) (Hypotension)
(Alicyclic compounds) (Reserpine)

VEJDELEK, Z.J.; RAJSNER, M.; PROTIVA, M.

Ganglionic blocking substances. X. Derivatives of cyclohexamine.
Coll Cz Chem 25 no.1:245-253 Ja '60. (EEAI 9:12)

1. Forschungsinstitut fur Pharmazie und Biochemie, Prag.
(LOCAL ANESTHESIA)
(CYCLOHEXYLAMINE)
(NERVES)

ADLEROVA, E.; PROTIVA, M.

Synthetic experiments in the group of estrogenic hormones. XX. Experimental synthesis of B-nordoisynolic acid. Coll Cz chem 25 no.3: 778-783 Mr '60. (EEAI 9:12)

1. Forschungsinstitut fur Pharmazie und Biochemie, Prag.
(Estrogenic hormones)
(Nordoisynolic acid)

ADLEROVA, E.; ERNEST, I.; HNEVSOVA, V.; JILEK, J.O.; NOVAK, L.; POMYKECEK,J.; RAJSNER, M.; SOVA, J.; VEJDELEK, Z.J.; PROTIVA, M.

Experiments on synthesis in the group of hypotensive alkaloids. VIII. Syntheses of some tryptomine derivatives, substituted in positions 5,6, and 7. Coll Cz chem 25 no.3:784-796 Mr '60. (EEAI 9:12)

1. Forschungsinstitut fur Pharmazie und Biochemie, Prag.
(Alkaloids) (Aminoethylindole) (Hypotension)

NOVAK, L.; JILEK, J. O.; KAKAC, B.; ERNEST, I.; PROTIVA, M.

Synthetic experiments in the group of hypotensive alkaloids. IX. A new method for splitting racemates in the total synthesis of reserpine. Coll Cz Chem 25 no.8:2196-2206 Ag '60. (EEAI 10:9)

1. Forschungsinstitut fur Pharmazie und Biochemie, Prag.

(Alkaloids) (Hypotension) (Tartaric acid)
(Reserpine)

HRUVSOVA-SEIDLOVA, V.; PROTIVA, M.

Synthetic ataractics. II. 1-(Aminoalkyl)- and 1-(aminoalkylidene)-2,3:6,7-dibenzosuberane. Cesk. farm. 10 no.9:459-464 '61.

1. Vyzkumny ustav pro farmacii a biochemii, Praha.
(TRANQUILIZING AGENTS chemistry)

PROTIVA, M.; HNEVSOVA-SEIDLOVA, V.; JIRKOVSKY, I.; NOVAK, L.; VEJDELEK, Z. J.

Synthetic ataractics. III. 2'-Substituted 2,3:6,7-dibenzosuberans with a 3-dimethylaminopropane group in position 1. Cesk. farm. 10 no.10: 506-515 D '61.

1. Vyzkumny ustav pro farmacii a biochemii, Praha.

(TRANQUILIZING AGENTS chem)

VEJDELEK, Z. J.; PROTIVA, M.

Synthetic ataractics. IV. 2,3,:6,7-Dibenzo-4-suberines substituted with a dimethylaminopropane group in position 1. Cesk. farm. 11 no.1: 3-7 '61.

1. Vyzkumny ustav pro farmacii a biochemii, Praha.

(TRANQUILIZING AGENTS chem)
(CYCLOPARAFFINS chem)

RAJSNER, M.; KAKAC, B.; PROTIVA, M.

Synthetic experiments in the group of hypotensive active alkaloids. X. Reaction of 3-bromine-5-acetoxy-8-hydroxy-cis 3,4,5,8,9,10-hexahydro-1-naphthoic-acid lactone with silver(I)-acetate. Coll Cz chem 26 no.1:91-97 Ja '61. (KEAI 10:9)

1. Forschunginstitut fur Pharmazie und Biochemie, Prag.

(Hypotension) (Alkaloids) (Bromine) (Lactones)
(Silver acetate) (Hexahydronaphthoic acid)
(Hydrides)

NOVAK, L.; PROTIVA, M.

Synthetic experiments in the group of hypotensive active alkaloids. XI. (±)-10-fluordeserpidine. Coll Cz Chem 26 no.3:681-686 Mr '61. (EEAI 10:9)

1. Forschungsinstitut fur Pharmazie und Biochemie, Prag.

(Deserpidine) (Alkaloids) (Fluorine)

JILEK, J. O.; ERNEST, I.; NOVAK, L.; RAJSNER, M.; PROTIVA, M.

Synthetic experiments in the group of hypotensive action alkaloids. XII. Contribution to the terminal phases of total synthesis of reserpine and deserpidine. Coll Cz Chem 26 no.3:687-700 Mr '61. (EEAI 10:9)

1. Forschungsinstitut fur Pharmazie und Biochemie, Prag.

(Reserpine) (Deserpidine) (Alkaloids)

BOROVICKA, M.; SEDIVY, Z.; PROTIVA, M.

Synthetic experiments in the group of estrogenic hormones. XXI. Derivatives of 3,4-dimethyl-3-carboxycyclohexanones. Coll Cz Chem 26 no.3:730-739 Mr '61. (EEAI 10:9)

1. Forschungsinstitut fur Pharmazie und Biochemie, Prag.

(Cyclohexanone) (Estrogenic hormones) (Methyl group (Carboxyl group)

ERNEST, I.; PROTIVA, M.

Synthetic tests in the group of hypotensive active alkaloids. Part 14: (±)-methyl-O-(O-carbathoxysyringoyl)-10-methoxydeserpidat. Coll Cz Chem 26 no.4:1137-1144 Ap '61.

1. Forschungsinstitut fur Pharmazie und Biochemie, Prag.

(Alkaloids)

JILEK, J. O.; POMYKACEK, J.; PROTIVA, M.

Synthetic tests in the group of hypotensive active alkaloids. Part 15: Synthesis of racemic homoveratrylamine analogues of reserpines and isoreserpines. Coll Cz Chem 26 no.4:1145-1159 Ap '61.

1. Forschungsinstitut fur Pharmazie und Biochemie, Prag.

(Alkaloids) (Reserpine)

PROTIVA, M.; CAPEK, A.; JILEK, O.; KAKAC, B.; TADRA, M.

Synthetic experiments in the group of hypotensive active alkaloids. XVIII. Microbiologic reduction of lactons of the (±)-5-oxo-8β-hydroxy-cis-1,4,5,8,9,10-hexahydro-1β-naphthalic acid. Coll Cz chem 26 no.6:1537-1541 Je '61.

1. Forschungsinstitut fur Pharmazie und Biochemie, Prag.

(Lactons) (Naphthalic acid)

JILEK, O. J.; KAKAC, B.; PROTIVA, M.

Synthetic experiments in the group of hypotensive active alkaloids. Part 19: Reduction of (±)-5,8-dioxo-cis-1,4,8,9,10-hexahydro-1 β-naphtoicacidisopropylesters according to Meerwein. Coll Cz Chem 26 no.9:2229-2237 '61.

1. Forschungsinstitut fur Pharmazie und Biochemie, Prag.

(Alkaloids) (Esters)

CAPEK, A.; TADRA, M.; KAKAC, B.; ERNEST, I.; PROTIVA, M.

Microbiological transformation of derivatives of hexahydronaphthoic acid. Folia microbiol. 7 no.4:253-254 62.

1. Institute of Pharmacy and Biochemistry, Prague 3.
(NAPHTHALENES - metabolism) (LACTONES - metabolism)
(FUNGI - metabolism) (ACTINOMYCES - metabolism)

SEIDLOVA, V.; SEDIVY, Z.; PROTIVA, M.

Synthetic ataractics. V. Some captodiamine analogues. Cesk. farm. 11 no.6:308-315 Jl '62.

1. Vyzkumny ustav pro farmacii a biochemii, Praha.
(TRANQUILIZING AGENTS chem)

RAJSNER, M.; PROTIVA, M.

Synthetic ataractics. VII. 11-(3-Dimethylaminopropylidene)-6,11-dihydrodibenzo (b,e)thiepin. Cesk. farm. 11 no.8:404-409 O '62.

1. Vyzkumny ustav pro farmacii a biochemii, Praha.
(TRANQUILIZING AGENTS) (ANTIDEPRESSIVE AGENTS)

PROTIVA, M.; NOVAK, L.; SEDIVY, Z.

Antihistamine substances. Part 49: p-substituted N-(α-phenylethyl) ethylenediamine derivates. Coll Cz Chem 27 no.9:2102-2110 S '62.

1. Forschunginstitut fur Pharmazie und Biochemie, Prag.

PROTIVA, M.

CZECHOSLOVAKIA

PROTIVA, M; JILEK, J; POMYKACEK, J; JIRKOVSKY, J; VEJDELEK, Z.

Research Institute of Pharmacy and Biochemistry (Forschungs-institut für Pharmazie und Biochemie), Prague (for all)

Prague, Collection of Czechoslovak Chemical Communications, No 10, 1963, pp 2627-2635

"Synthetic Analgetica V. Synthetic Experiments on a Base of 4-phenyl-4-Carbethoxypiperidine (Norpethidine)."

(5)

ADLEROVA, E.; SEIDLOVA, V.; PROTIVA, M.

Synthetic ataractics. IX. Analogues of prothiadene with heterocyclic groups in the side chain. Cesk. farm. 12 no.3:122-126 Mr '63.

1. Vyzkumny ustav pro farmacii a biochemii, Praha.
(TRANQUILIZING AGENTS) (CHEMISTRY)
(CHEMISTRY, PHARMACEUTICAL)

PROTIVA, M.; VEJDELEK, Z.J.; RAJSNER, M.

Synthetic experiments in the group of active hypotensive alkaloids. Pt. 25. Coll Cz Chem 28 no.3:629-636 Mr '63.

1. Forschungsinstitut fur Pharmazie und Biochemie, Prag.

ERNEST, I.; JILEK, J.O.; VEJDELEK, Z.J.; PROTIVA, M.

Sythetic experiments in thegroup of active hypotensive alkaloids. Pt. 26. Coll Cz Chem 28 no.4:1022-1030 Ap '63.

1. Forschungsinstitut fur Pharmazie und Biochemie, Prag.

RAJSNER, M.; ADLEROVA, E.; PROTIVA, M.

Synthetic analgesics. Pt. 4. Coll Cz Chem 28 no.4:1031-1043 Ap '63.

1. Forschungsinstitut fur Pharmazie und Biochemie, Prag.

JIRKOVSKY, J.; PROTIVA, M.

Synthetic experiments in the group of hypotensive active alkaloids. Pts. 27-28. Coll Cz Chem 28 no.10:2577-2587 O '63.

1. Forschungsinstitut fur Pharmazie und Biochemie, Prag.

PROTIVA, M.; JILEK, J.O.; POMYKACEK, J.; JIRKOVSKY, J.; VEJDELEK, Z.J.
SEIDLOVA, V.

Synthetic analgesics. Pts. 5-6. Coll Cz Chem 28 no.10:2627-2636, 2821-2824 O '63.

1. Forschung institut fur Pharmazie und Biochemie, Prag.

JIRKOVSKY,I.; PROTIVA,M.; ERNEST,J.

Synthetic experiments in the group of active hypotensive alkaloids. Pts.29-30. Coll Cz Chem 28 no.11:3096-3112 N'63.

1. Forschungsinstitut fur Pharmazie and Biochemie, Prag.

PROTIVA, M.

Rules of steroid nomenclature. Chem listy 57 no.4:350-359 Ap '63.

PROTIVA, M.

"Chemobiodynamics and frug design" by F.W.Schueler. Reviewed by M.Protiva. Chem listy 57 no.9:989-990 S '63.

"Progresses in pharmaceutical research" edited by E.Jucker. Vol.4. Reviewed by M.Protiva. 990-992

VEJDELEK,Z.J.; PROTIVA,M.

Drugs blocking the sympatheric ganglia. XII. 1,2,2-trimethyl-1-tetralylmethylamin. Cesk. farm. 13 no.2:49-52 F'64.

Drugs blocking the sympathetic ganglia. XIII. Derivatives of 6-(2-dimethylaminoethyl)-5, 7-dihydro-6H-pyrrilo(3,4-b) pyridine. Ibid: 76-78

1. Vyzkumny ustav pro farmacii a biochemii, Praha.

*

ADLEROVA,E.; VEJDELKOVA,P.; PROTIVA,M.

Synthetic spasmolytics. Pt.19. Coll Cz Chem 29 no.1:97-120 Ja'64

1. Forschungsinstitut fur Pharmazie und Biochemie, Prag.

ERNEST, I.; KAKAC,B.; PROTIVA,M.

Synthetic experiments in the group of active hypotensive alkaloids. Pt.31. Coll Cz Chem 29 no.1:251-265 Ja'64.

1. Forschungsinstitut fur Pharmazie und Biochemie, Prag.

CZECHOSLOVAKIA

PROTIVA, M.; JILEK, J.O.; Pharmaceutical and Biochemical Research Institute, Prague. /Original version not given/.

"Chemistry of Perathiepin, a New Neuroleptic Drug."

Prague, Activitas Nervosa Superior, Vol 8, No 4, Nov 66, p 388

Abstract: Substances derived from isomeric 10,11-dihydro-dibenzo (b,f) thiepin show antidepressant and antihistaminic effects. The 10-(4-methylpiperazino)-10,11-dihydrodibenzo (b,f) thiepin (perathiepin) shows a surprisingly high degree of antidepressant activity. The 8-chloro derivative of perathiepin (octoclothepine) exceeds the activity of the parent compound. Structural formulas of the 2 drugs are given. 3 Czech references. Submitted at the 8th Annual Psychopharmacological Meeting at Jesenik, 18 - 22 Jan 66. Article is in English.

1/1

CZECHOSLOVAKIA

JIRKOVSKY, I; ERNEST, I; PROTIVA, M.

Research Institute of Pharmacy and Biochemistry (Forschungsinstitut fuer Pharmazie und Biochemie), Prague (for all)

Prague, Collection of Czechoslovak Chemical Communications, No 10, 1965, pp 3355-3359

"Synthetic Experiments in the Group of Hypotensively Active Alkaloids. XXXVII. New Phenohydroxyacetic Acid - and Phenylmercaptoacetic Acids Esters of Methylreserpate."

CZECHOSLOVAKIA

JILEK, J.O; PELZ, K; VEJDELEK, Z.J; PROTIVA, M

Research Institute for Pharmacy and Biochemistry (Forschungs-institut fur Pharmazie and Biochemie), Prague

Prague, Collection of Czechoslovak Chemical Communications, No 1, January 1966, pp 269-278

"Neurotropic and psychotropic substances. Part 7: 2-alkoxy-9-(3-dimethylaminopropyliden) thioxanthene and an additional derivative of prothixene."

JILEK, J.O.; RAJSNER, M.; POMYKACEK, J.; PROTIVA, M., inz. dr., DrSc., (Kourimska 17, Praha 3).

Synthetic ataraxics. Part 12. Cesk. farm. 14 no.6:294-303 Ag '65.

1. Vyzkumny ustav pro farmacii a biochemii, Praha. Submitted December 21, 1964.

SEIDLOVA,V.; METYSOVA,J.; HRADIL,F.; VOTAVA,Z.; PROTIVA,M.

Synthetic ataractics. XI. Substituted 1,1-diphenyl-4-dimethylaminobutane and 1,1-diphenyl-4-dimethylaminobutene. Cesk. farm. 14 No.2:75-81 F '65.

1. Vyskumny ustav pro farmacii a biochemii, Praha.

JILEK, J.O.; POMYKACEK, J.; SVATEK, E.; SEIDLOVA, V.; RAJSNER, M.; PELZ, K.; HOCH, B.; PROTIVA, M.

Neurotropic and psychotropic substances. Pt.2. Coll Cz Chem 30 no.2:445-462 F '65.

1. Forschungsinstitut fur Pharmazie und Biochemie, Prague.
Submitted May 4, 1964.

PROTIVA, M., inz. dr. DrSc. (Praha 3, Kourimska 17); NOVAK, L.; VEJDELEK, Z.J.; ERNEST, I.

Sympathetic ganglionic blocking agents. Pt.14. Cesk. farm. 14 no.7:346-351 S '65.

PROTIVA, M.; RAJSNER, M.; ADLEROVA, E.; SEIDLOVA, V.; VEJDELEK, Z.J.

Neurotropic and psychotropic substances. Pt.1.: Coll Cz Chem 29 no.9:2161-2181 S '64.

1. Forschunginstitut fur Pharmazie und Biochemie, Prague.

JILEK, J.O.; PELZ, K.; PAVLICKOVA, D.; PROTIVA, M.

Neurotropic and psychotropic substances. Pt.4. Coll Czech Chem 30 no.5:1676-1683 My '65.

1. Forschungsinstitut fur Pharmazie und Biochemie, Prague.
Submitted June 22, 1964.

JILEK, J.O.; POMYKACEK, J.; METYSOVA, J.; METYS, J.; PROTIVA, M.

Neurotropic and psychotropic substances. Pt.3. Coll Cz Chem 30 no.2:463-471 F '65.

1. Forschungsinstitut fur Pharmazie und Biochemie, Prague.
Submitted May 4, 1964.

CZECHOSLOVAKIA

NOVAK, L.; PROTIVA, M.

Research Institute for Pharmacy and Biochemistry, Prague - (for both).

Prague, Collection of Czechoslovak Chemical Communications, No 11, November 1965, 3752-3759.

"Antihistamine substances. Part 52: Synthesis of p-hydroxyderivate of mebrophenhydramine and diphenhydramine."

PROTIC, P.

Consumption of petroleum derivatives from 1946 to 1954. p. 261.

NAFTA. (Institut za naftu) Zagreb. Vol. 6, no. 8, Aug. 1955.

So. East European Accessions List Vol. 5, no. 9 September, 1956

PROTIC, Z.

Survey of basic raw materials and processes in the solution of our problems of power from thermal and chemical sources. p. 1210. TEHNKA (Savaz inzenjera i techicara Jugoslavije) Beogard. Vol. 11, no. 8, 1956.

SOURCE: East Europe Accession List (EEAL), Library of Congress, Vol. 5, no. 11, Nov. 1956

PROTIC, ZIVOJIN D.

La publication des bulletins analytiques de la science pure et appliquee et leur importance dans les pays qui n'ont de service de documentation developpe. Belgrade, Centre de documentation technique et scientifique de Yougoslavie, 1955. 13p. (Publication of analytic bulletins on pure and applied science and their importance for countries without a developed documentation service. In French)

SOURCE: East European Accessions List (EEAL), LC, Vol, 5, no. 2, Feb. 1956

PROTICH, B. (Belgrad)

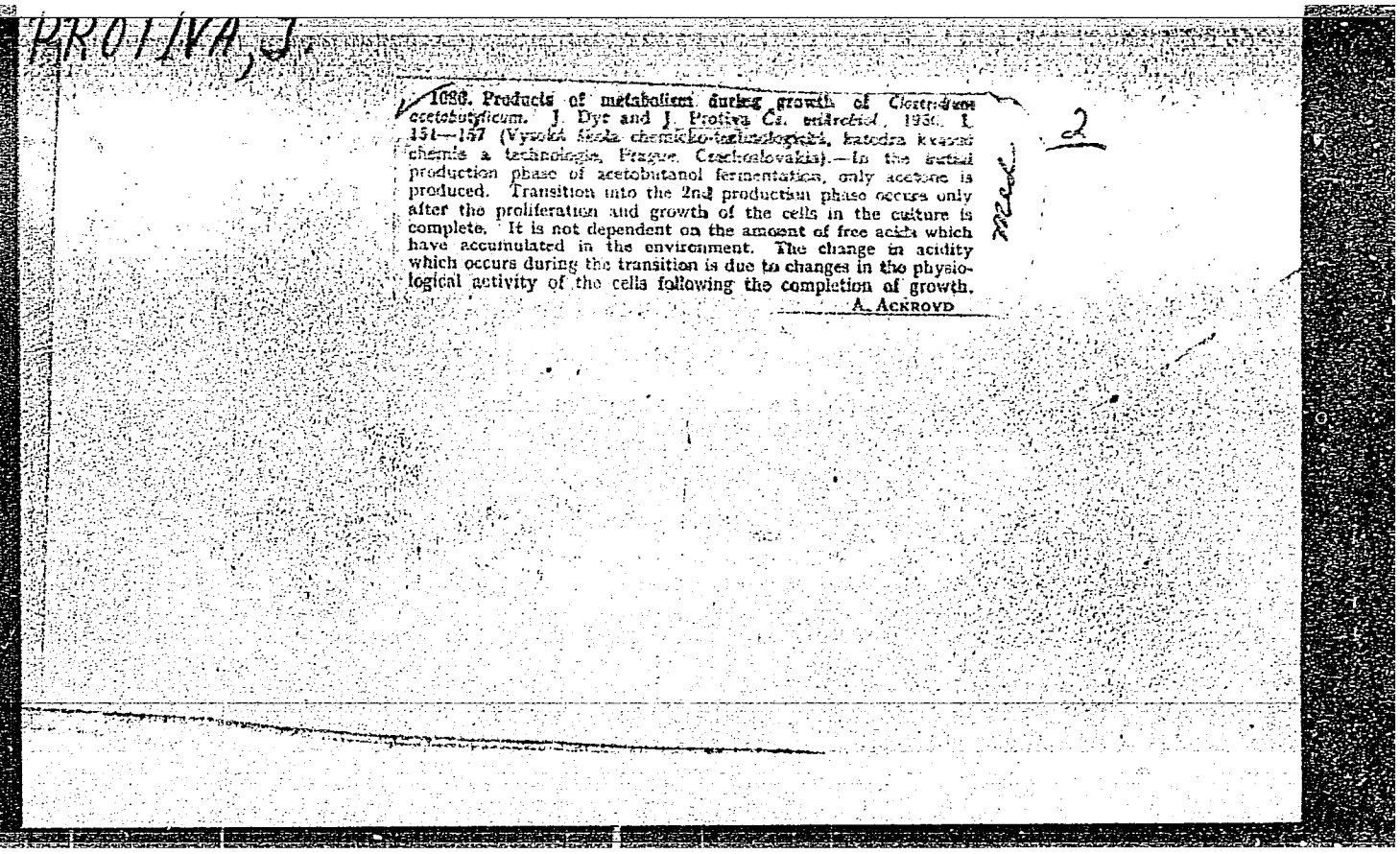
One Algol-type star with a very shor eclipsing period belonging to the nonstationary stars. Astron.tsirk. no.174:15 N '56. (Stars, Variable) (MIRA 10:3)

PROTITCH, M.

PROTITCH, M. Photographic observations of the comet Abell(1953g) made with a 160 mm astrograph.

Vol. 19, no. 1, 1954
BULLETIN
SCIENCE
Beograd.

SO: MONTHLY LIST OF EAST EUROPEAN ACCESSIONS, (EEAL), LC, VOL. 19, no. 1, 1954
Sept. 1954, Encl.



PROTIVA, J.

1080. Products of metabolism during growth of *Clostridium acetobutylicum*. J. Dyr and J. Protiva *Cs. mikrobiol.*, 1956, 1, 151—157 (Vysoká škola chemicko-technologická, katedra kvasné chemie a technologie, Prague, Czechoslovakia).—In the actual production phase of acetobutanol fermentation, only acetone is produced. Transition into the 2nd production phase occurs only after the proliferation and growth of the cells in the culture is complete. It is not dependent on the amount of free acids which have accumulated in the environment. The change in acidity which occurs during the transition is due to changes in the physiological activity of the cells following the completion of growth.

A. ACKROYD

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[illegible] V., et al.

Observation of the [illegible] of flavine pigment in [illegible] sp. p. 57.

[illegible] vol. 5, no. 1, Jan. 1956

Czechoslovakia

so. [illegible] vol. 5, no. 7 July 1956

Protiva, Karel

11698* Ferrochromium With Low Carbon Content. Ferrochrom s nízkým obsahem uhlíku. (Czech.) Karel Protiva. Hutník, v. 6, no. 2, Feb. 1956, p. 41-44.
Methods of preparing a low C ferrochrome. Importance of ferro-alloys as steel-making additions and standards for them. Table. 10 ref.

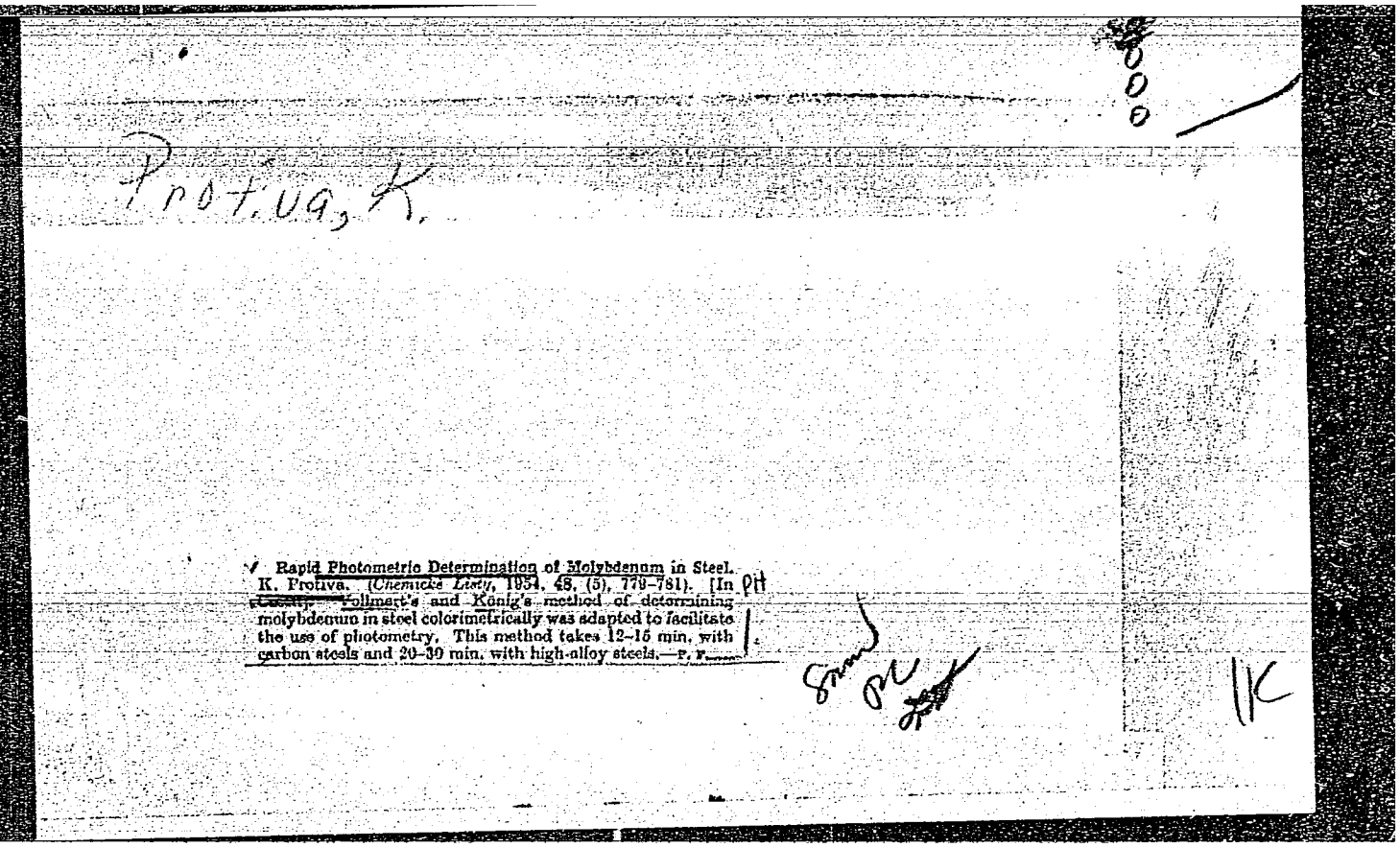
(Clipped Abstract)

Of

PROTIVA, K.

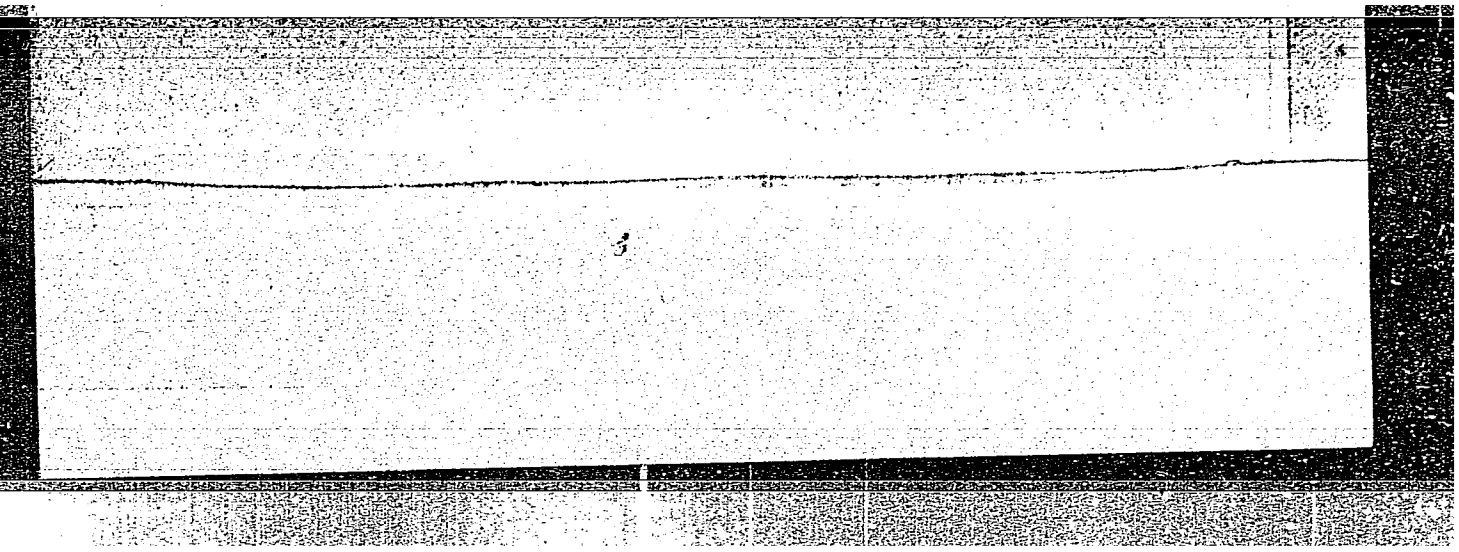
Ferrochromium with a low carbon content. p.41.
HUTNIK, Prague, Vol. 6, no. 2, Feb. 1956.

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 5, No. 6 June 1956, Uncl.



Prot. UG, K.

Rapid Photometric Determination of Molybdenum in Steel. K. Protiva. (*Chemické Listy*, 1954, 48, (5), 779–781). [In Czech.] Tollmert's and König's method of determining molybdenum in steel colorimetrically was adapted to facilitate the use of photometry. This method takes 12–15 min. with carbon steels and 20–30 min. with high-alloy steels.—P. F.



APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R001343320013-1"

Z/004/60/000/008/001/002
A121/A027

AUTHOR: Protiva, Karel, Engineer

TITLE: Nickel Saving by Use of New Stainless Steels

PERIODICAL: Nová Technika, 1960, No. 8, pp. 351-353

TEXT: The consumption of large quantitites of nickel in the production of stainless steel necessitates the development of new types of steel alloys with a reduced content of nickel or with no nickel at all. Until now, the austenitic chromium-nickel stainless steel Cr18Ni9 was used to meet the ever increasing demands for stainless steel. To save nickel, two methods have been suggested, either to adopt the semi-ferritic stainless steel Cr17 or variants of this type of steel with additions of titanium or aluminum on the one hand, or to develop austenitic stainless steels in which nickel is partly or completely replaced by manganese and a samll quantity of nitrogen. Research work in this field has been partially completed and the results lead to full-scale applications. POLDI AK1B steel, CSN 17041, the basic type of Cr17 steels, shows inferior corrosion resistance, inferior cold working properties, lower, tensile strength, contraction and Ericson cupping values, as compared to Cr18Ni9. The

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Nickel Saving by Use of New Stainless Steels

reduction in the drawing processes should not exceed 20-30 %; a large bending radius at temperatures of 100-200°C should be observed (Ref. 1). The pressing process and welding of Cr17 steel is briefly described. Best welding seams may be obtained with Cr18Ni9, Cr20Ni10 or Cr25Ni20 austenitic chrome-nickel electrodes; most suitable argon-shielded arc welding is achieved by metallic electrodes. Some of the above-mentioned unfavorable characteristics may be eliminated by use of Cr17Ti steel (Ref. 2), which shows higher ductility. Annealing temperatures of 700°C followed by air cooling are recommended. Cr17Ti has good cold working properties. Production and processing of POLDI AKM steel correspond to those of the Cr18Ni9 stainless steel, but its elasticity limit is higher by 20 %; the corrosion resistance to sulphuric acid, nitric acid etc., is lower; in the cold rolling process about 1/5 drawings more are required than with Cr17Ni7 or Cr18Ni9 stainless steel; POLDI AKM steel oxidizes at 800°C; its heat conductivity is lower than that of Cr18Ni9 steel and 2 mm sheets have to be annealed during a period of 4 minutes. For arc welding E 388 electrode, or flame welding G 088 type wire or AKM steel scrap is used. Tests proved that POLDI AKM steel can be used to replace Cr18Ni9 POLDI AMVN

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steel in production of consumer goods, in transport food and chemical industries etc. There are 4 photographs and 2 Czechoslovak references.

ASSOCIATION: SONP, Kladno

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E073/E535

AUTHOR: Protiva, Karel, Engineer

TITLE: Development of the Manufacture of Stainless Steels in Open Hearth Furnaces

PERIODICAL: Hutnické listy, 1961, No.1, pp.7-12

TEXT: Basically, the methods of processing stainless steel scrap can be grouped into the following two categories: processing by simple re-smelting and finishing the heat under a reduction slag; re-smelting of the slag and oxidation of the carbon in a bath using gaseous oxygen. The first method is the simplest and also the most economical but the process is limited to charges with relatively low C contents. In the use of the second method difficulties arise with deterioration in the lining and roof of the furnace, in view of the higher temperatures during oxygen blowing which are necessary for achieving a high Cr extraction rate; also there is an undesirable rise in the P content. In the SONP Works the best method of processing scrap was found to be simple re-smelting in 30-ton open hearth furnaces right to the finishing stage. Simultaneously, the problem has been solved of utilising scrap of a new type of stainless steel Cr17Mn8Ni4N2, which from the metallurgical

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Development of the Manufacture of Stainless Steels in Open Hearth Furnaces

point of view causes still more difficulties than scrap of the steels Cr18Ni9 and Cr18Ni10Mo2. First, the author deals with processing of scrap of the steels Cr18Ni9, Cr18Ni9Ti, Cr18Ni10Mo2 and Cr18Ni10Mo2Ti in a 30-ton open hearth furnace with basic lining, a chromium magnesite roof fired with a mixture of producer gas and coke gas. The average losses due to burning off of the main components are as follows: 10% Cr, 4% Ni, 4% Mo, 50% Mn, 42% Si. Following that, re-smelting and oxidation of carbon in a bath with gaseous oxygen is dealt with. It is stated that a new technology applied by SONP combines the advantages of the two basic processes. The charge is processed right to the final stage, the only difference being that the silicon content in the charge is increased to about 1% by adding SiCr. Following that, the bath temperature is increased to the required value by short duration oxidation with gaseous oxygen and during that time (about 5 min for the charge under consideration) only silicon is oxided and this strongly exothermic reaction will heat up the bath to such an extent that after final deoxidation tapping can be effected immediately. By this

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