

PROCESSED AND PREPARED BY INDEX

10

The sugar series of alcohols. P. VALENTIN. *Collection Czechoslov. Chem. Comm*

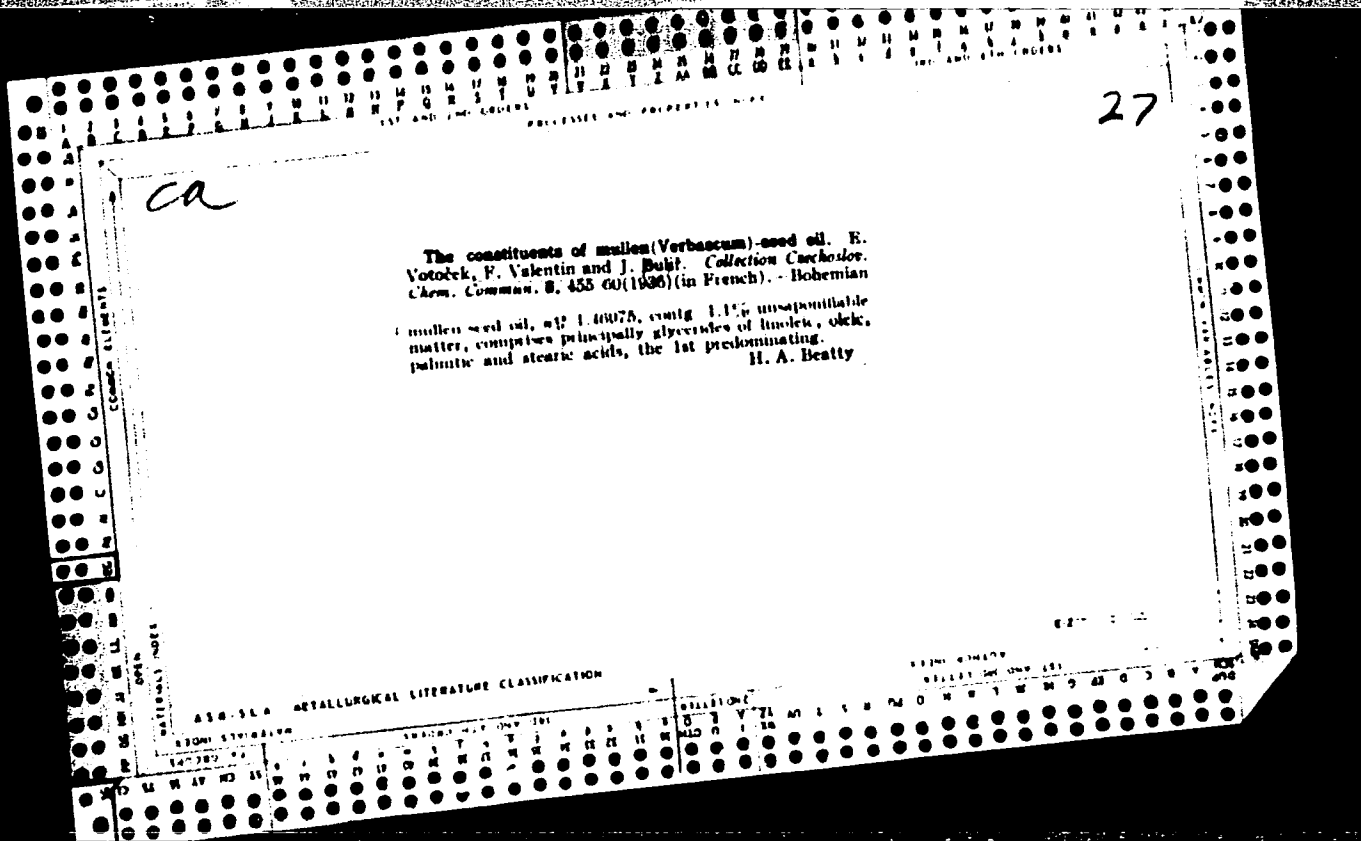
3, 499-513(1931).—According to Hefferich and Becker (C. A. 19, 250), trityl chloride,  $\text{ClCPh}_3$  (I), reacts only with a primary hydroxyl. In the present work on the purely alc. substances of the sugar series, it was found that as many mols. of I react as there are primary hydroxyls present. General method of prepn.: to the sugar alc. in the least quantity of dry pyridine is added the calcd. amt. of I and the product is pptd. with  $\text{H}_2\text{O}$  after 1-3 days. If the sugar alc. like dulcitol, is insol. in pyridine, the method does not work. The yields are up to 90%. The trityl ethers crystallize well. The mono-ethers are easily sol. in  $\text{MeOH}$  and  $\text{EtOH}$ , while the di-ethers are more sol. in  $\text{C}_6\text{H}_6$ ,  $\text{Me}_2\text{CO}$ ,  $\text{CHCl}_3$  and  $\text{Et}_2\text{O}$ . The ethers dissolve in concd.  $\text{H}_2\text{SO}_4$  to a brown soln., which on pouring into  $\text{H}_2\text{O}$  quantitatively ppt.  $\text{Ph}_3\text{COH}$ . They should prove valuable for synthetic work. *Trityl-L-thammitol*, m. 132-5°;  $[\alpha]_D^{20}$  3.95°; *trityl/fucitol*, m. 135-42°;  $[\alpha]_D^{20}$  -5.0°; *trityl-pirhammitol*, m. 68-72°;  $[\alpha]_D^{20}$  -4.2°; *trityl- $\alpha$ -thamnohexitol*, m. 103-4°;  $[\alpha]_D^{20}$  -2.0°; *ditritylmesoerythritol*, m. 182-4°; *ditrityladonitol*, m. 141-5°; *ditritylxyloid*, m. 162-0°; *ditrityl-L-arabitol*, m. 111-3°;  $[\alpha]_D^{20}$  -3.5°; *ditritylmannitol*, m. 98-103°;  $[\alpha]_D^{20}$  -3.5°; *ditritylsorbitol*, m. 72-83°;  $[\alpha]_D^{20}$  -7.8°; *ditrityl- $\alpha$ -glucoheptitol*, m. 117-23°; *tetratritylpentaeerythritol*, m. 350°.

ALFRED HOFFMAN

METALLURGICAL LITERATURE CLASSIFICATION







LIST AND 175 OTHERS

PROCEDURES AND PROPERTIES INDEX

**32**

**Rhodose** (4-hydroxy-2-pyridone) from opt-  
 rhodose (4-hydroxy-2-pyridone) from Vorochin  
 and E. N. Kuznetsov (Dokl. Akad. Nauk SSSR, 1958,  
 2, 22-23). The refractive indices of pure rhodose  
 and epirhodose derivatives have been determined  
 and are in agreement with Hudson's rules. Tashiro  
 and Nakamura's methylrhodose,  $[\alpha]_D^{20} +120^\circ$  (optically  
 impure, the pure d'component having  $[\alpha]_D^{20} +120^\circ$ )  
 (Hudson predicted  $+127.05$  to  $+126.0^\circ$  in water, follows  
 rhodose,  $[\alpha]_D^{20} +127.05$  to  $+126.0^\circ$  in water, follows  
 a unimolecular law. Methylrhodose,  $[\alpha]_D^{20} +14.9^\circ$  in  
 water (phenylrhodose,  $[\alpha]_D^{20} +14.9^\circ$  in  
 methyl alcohol), is prepared by the action of methyl  
 alcoholic hydrogen chloride on rhodose at  $100^\circ$  for  
 40 hrs. in a closed vessel. Rhodose,  $[\alpha]_D^{20} +14.9^\circ$  in methyl  
 alcohol; rhodose,  $[\alpha]_D^{20} +14.9^\circ$  in methyl  
 acetone, m. p.  $106^\circ$ ; has m. p.  $200^\circ$ ;  $[\alpha]_D^{20} +12^\circ$  in  
 water. Epirhodose, m. p.  $192^\circ$ ;  $[\alpha]_D^{20} -20.0^\circ$   
 in water (corresponding phenylhydrazide, m. p.  $170^\circ$ ,  
 rhodose with bromine water, and fractionally crystall-  
 izing the barium salt; rhodotetraacetone,  $[\alpha]_D^{20}$   
 $+44.2^\circ$  in water, was similarly prepared. Rhodoc-  
 tetraacetone,  $[\alpha]_D^{20} +34.2^\circ$  in water, was obtained by the  
 Wohl-Ziegler reduction of rhodose. Reduction of epi-  
 rhodose with sodium amalgam gave epi-  
 rhodose (phenylrhodose, m. p.  $136^\circ$ ), con-  
 verted by a further quantity of sodium amalgam in  
 acid solution into epirhodite, m. p.  $104^\circ$ ,  $[\alpha]_D^{20} +2^\circ$  in  
 water, purified through the benzylideneacetal deriv-  
 ative, m. p.  $164^\circ$ ,  $[\alpha]_D^{20} -40.9^\circ$  in chloroform.  
 A. I. VOGL.

METALLURGICAL LITERATURE CLASSIFICATION

FROM 50-1174

521127 Oct 017 151

PROCESSING AND PROPERTIES INDEX

a-3

*BC*

**Sugar-alcohols.** F. VALENTIN (Coll. Czech. Chem. Comm., 1931, 3, 499-513). -In agreement with Hollostein's rule (A., 1928, 1, 6) C<sub>6</sub>H<sub>12</sub>O<sub>6</sub> reacts to form ethers with all the primary alcohol groups in sugar alcohols but not with secondary alcohol groups, and thus are obtained the C<sub>6</sub>H<sub>12</sub>O<sub>6</sub> ethers of L-rhamnitol, m. p. 122-126°, [α]<sub>D</sub> +3.65° in C<sub>6</sub>H<sub>6</sub>; fucitol, m. p. 124-142°, [α]<sub>D</sub> -5.0° in C<sub>6</sub>H<sub>6</sub>; epirhamnitol, m. p. 68-73°, [α]<sub>D</sub> -4.2° in C<sub>6</sub>H<sub>6</sub>; L-rhamnohexitol (alcohol, m. p. 159-165°; Me., m. p. 170-173°), m. p. 122-126°, [α]<sub>D</sub> -3.6° in C<sub>6</sub>H<sub>6</sub>; MeOH (2:1); (C<sub>6</sub>H<sub>12</sub>O<sub>6</sub>)<sub>2</sub> ethers of mannorythritol, m. p. 182-184°; adonitol, m. p. 141-145°; xylitol, m. p. 158-159°; L-arabitol, m. p. 111-115°, [α]<sub>D</sub> -3.5° in C<sub>6</sub>H<sub>6</sub>; L-mannitol, m. p. 92-103°, [α]<sub>D</sub> -3.5° in C<sub>6</sub>H<sub>6</sub>; sorbitol, m. p. 85° (softens at 75°), [α]<sub>D</sub> -7.6° in C<sub>6</sub>H<sub>6</sub>; α-glucosylitol, m. p. 117-120°; glycol, m. p. 191° (cf. A., 1928, 1, 521; crystallographic data by Novák); and the (C<sub>6</sub>H<sub>12</sub>O<sub>6</sub>)<sub>2</sub> ether of pentarythritol, m. p. above 250°. C<sub>6</sub>H<sub>12</sub>O<sub>6</sub> or C<sub>12</sub>H<sub>24</sub>O<sub>12</sub> derivatives of these ethers could not be obtained. J. W. BAKER.

METALLURGICAL LITERATURE CLASSIFICATION

FROM ROMANIAN

BIBLIOTECA

BIBLIOTECA ROMANA

PROCESS AND PROPERTIES INDEX

1-3

752

A new sugar consisting of carbohydrates: K. Vorobev and V. V. V. (USSR) was examined in Comin. 1928. It was obtained by treating 95% alcohol with aqueous barium hydroxide until the solution became neutral (about 6 days) and then the solution was concentrated to a syrupy consistency. The solid was then hydrolyzed by using 10% sulphuric acid and the syrup produced was allowed to remove acetone, and then repeatedly extracted with small quantities of ether. Crystals of phenylpicric acid, (p-bromophenylhydrazine) and phenylpicric acid, m. p. 155°C, were prepared from the residual syrup and the mother liquor was allowed to contain rhodone and rhamine by treatment with phenylpicric acid in a carbon dioxide atmosphere. A. I. VOOM.

METALLURGICAL LITERATURE CLASSIFICATION

GROUP	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
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1ST AND 2ND LAYERS  
3RD AND 4TH LAYERS

PROCESSING AND PROPERTIES INDEX

7

*BC*

New form of two enantiomorphous rhamsites.  
 F. VALENTIN (Ost. Chem. Gesell. Comm., 1900: 2, 600-602).—Reduction of rhamsite with 2% sodium amalgam and crystallization of the product from water. *d*-rhamsite: m.p. 80°, [α]<sub>D</sub> +0.45° in water; *l*-rhamsite: m.p. 80°, [α]<sub>D</sub> -0.45° in water; both soluble in water in a vacuum to 1.5% in water; *d*-rhamsite: m.p. 80°, [α]<sub>D</sub> +0.45° in water, whilst *l*-rhamsite has m.p. 80°, [α]<sub>D</sub> -0.45° in water, whilst *r*-rhamsite, prepared by crystallizing equal quantities of the enantiomorphs from water, has m.p. 117° and is anhydrous. Crystallographic data for the *d*- and *l*-rhamsite trihydrates are given; the crystals exhibit enantiomorphous facets. O. W. SMORAN.

ASS.-SLA METALLURGICAL LITERATURE CLASSIFICATION

FROM SOURCE

10000 11000 12000 13000 14000 15000 16000 17000 18000 19000 20000 21000 22000 23000 24000 25000 26000 27000 28000 29000 30000 31000 32000 33000 34000 35000 36000 37000 38000 39000 40000 41000 42000 43000 44000 45000 46000 47000 48000 49000 50000 51000 52000 53000 54000 55000 56000 57000 58000 59000 60000 61000 62000 63000 64000 65000 66000 67000 68000 69000 70000 71000 72000 73000 74000 75000 76000 77000 78000 79000 80000 81000 82000 83000 84000 85000 86000 87000 88000 89000 90000 91000 92000 93000 94000 95000 96000 97000 98000 99000

COMPOUND ELEMENTS

NATURAL ISOTOPES

FIG. 11174A MICROD.

BC  
 [3:6]-Anhydrogalactose. F. VALERTIN (Coll. Chem. (Chem. Comm., 1232, 4, 364-378).— $\alpha$ -Methylgalactoside (modified prep.), when treated in  $C_4H_8N$  with  $(Ph_3C)$  and then with  $Ac_2O$ , gives 2:3:4-

trioctyl-6-triphenylmethyl- $\alpha$ -methylgalactoside, m.p. 179-181°,  $[\alpha]_D +86^\circ$  in  $C_6H_6$ , which, when treated with  $PhI$ , in ethylene dibromide and then with  $NH_3-MeOH$ , affords  $\alpha$ -methylgalactosidyl 6-bromide, decomp. 163°,  $[\alpha]_D +157^\circ$  in  $H_2O$ . This with  $Be(OH)_2$  yields 3:6-anhydro- $\alpha$ -methylgalactoside, m.p. 141-143°,  $[\alpha]_D +82.4^\circ$  in  $H_2O$ , hydrolysed by 1%  $H_2SO_4$  to 3:6-anhydrogalactose (I), amorphous,  $[\alpha]_D$



in  $H_2O +37.6^\circ$ , changing to  $+27.2^\circ$  (phenylglucosazone, m.p. 215° (decomp.),  $[\alpha]_D +48.3^\circ$  in  $MeOH$ ). The possibility that (I) contains an ethylenic linking is excluded by its stability to halogens, and the constitution of the 3:6-ring follows from stereochemical reasons and the formation of the osazone. (I) decolorizes Schiff's reagent in 3-4 sec. and is considered to be an anhydro-aldehyde. Mutarotation is due to opening of the 1:5-ring, and not the more stable 3:6-ring, and equilibrium is between (I) and the aldehyde. For stereochemical reasons the pyranose ring can re-form only in one direction. R. S. C.

110-11A METALLURGICAL LITERATURE CLASSIFICATION



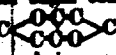




PROCESSES AND PROPERTIES INDEX

A-3

BC

*β*-Anhydromannono- $\gamma$ -lactone. Y. VALENTIN  
 (Coll. Czech. Chem. Comm., 1967, 0, 315-326).—  
 3:6-Anhydromannose treated with Br in H<sub>2</sub>O for  
 several days gives non-cryst. *β*-anhydromannonic  
 acid (I) (amorphous as salt), which yields a phenyl-  
 hydrazide, m.p. 180-5° (decomp.), [α]<sub>D</sub> +16.7° in  
 MeOH. This with KOH-H<sub>2</sub>O-PbCHO at the b.p.  
 gives the  $\gamma$ -lactone, m.p. 113°, [α]<sub>D</sub> +126.5° in H<sub>2</sub>O,  
 falling slowly to +115.5° after 200 hr. K<sub>2</sub> crotonate  
 reacts violently with AcCl-H<sub>2</sub>SO<sub>4</sub> giving *α*-  
 dioxolactone- $\gamma$ -*γ*-dilactone, m.p. 160-162°, [α]<sub>D</sub>  
 +165° in Ac<sub>2</sub>O. It is concluded that the two rings of  
 these and of other sugar compounds containing the  
 bicyclic system  have the same optical  
 character, [α] then being augmented, and that the  
 effect increases with the no. of CO groups.  
 E. W. W.

CRYSTALLINE LITERATURE CLASSIFICATION









PROCESSED AND REPRODUCED FROM THE ORIGINAL DOCUMENT

10

*CK*

**Anhydromannose, a new sugar anhydride.** K. Yalen-  
 tin. *Collection Czechoslov. Chem. Communications* 6,  
 354-70 (1934).—Mannose, treated with MeOH and HCl,  
 gave  $\alpha$ -*M*s mannopyranoside (I) in 75% yield. By treat-  
 ment of I in  $C_6H_5N$  with  $Ph_3CCl$  and acetylation, *6*-*trityl*-  
*2,3,4*-*tri*acetyl- $\alpha$ -methylmannoside (II),  $C_{21}H_{32}O_{10}$ , was ob-  
 tained, m. 131-2° (from MeOH or EtOH and ligroin),  
 $[\alpha]_D^{20}$  58.0°; yield 80%. Treated with  $PBr_3$  in  $CCl_4$ , II  
 gave the corresponding *6*-*Br* deriv. (III),  $C_{21}H_{31}O_{10}Br$ , m.  
 78-81° (from  $C_6H_6$  and ligroin),  $[\alpha]_D^{20}$  57.8°; yield 45%.  
 By action of  $NH_3$  in MeOH, III was transformed into the  
*6*-*bromo*- $\alpha$ -methylmannoside, m. 97-98°,  $[\alpha]_D^{20}$  62°; analy-  
 sis showed this material to be slightly impure. By treat-  
 ment with  $Ba(OH)_2$ , *3,6*-*anhydro*- $\alpha$ -methylmannopyra-  
 noside (IV),  $C_{14}H_{20}O_8$ , was obtained, m. 130-2° (from EtOAc),  
 $[\alpha]_D^{20}$  97.1°. Crystals of IV showed *a*:*b*:*c* = 0.996:1:  
 1.057. The *s* m by Becke's method with  $H_2SO_4$ , IV gave a  
 $D_n$  1.522,  $\gamma_n$  1.526. Hydrolyzed with  $H_2SO_4$ , IV gave a  
 sirup which crystd., m. 102-3°,  $[\alpha]_D^{20}$  95.92°. This was  
*3,6*-*anhydromannose* (mannofuranoside) (V). It showed  
 no mutarotation and required 10-15 min. to develop color  
 with fuchsin reagent. It formed a *benzylphenylhydrazone*,  
 $C_{21}H_{28}O_4N_2$ , m. 144-5° (from  $C_6H_6$ ),  $[\alpha]_D^{20}$  43.59°; a phenyl-  
 hydrazone insol. in  $H_2O$ ; and an *osazone*,  $C_{14}H_{16}O_4N_4$ , m.  
 188-90° (40% alc.),  $[\alpha]_D^{20}$  -110.14°. V, treated with HCl  
 in dry MeOH, gave a sirup which became cryst.,  $C_{14}H_{20}O_8$ ,  
 m. 85° (from AcOEt and ligroin),  $[\alpha]_D^{20}$  157°; this was  
*3,6*-*anhydro*- $\alpha$ -methylmannofuranoside. V's reasons for  
 believing the structures assigned are correct are given in  
 detail. M. P. Benoy

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

MATERIALS INDEX										COMMON ELEMENTS									
GROUP										ELEMENT									
1 2 3 4 5 6 7 8 9 10										11 12 13 14 15 16 17 18 19 20									
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831 832 833 834 835 836 837 838 839 840										841 842 843 844 845 846 847 848 849 850									
841 842 843 844 845 846 847 848 849 850										851 852 853 854 855 856 857 858 859 860									
851 852 853 854 855 856 857 858 859 860										861 862 863 864 865 866 867 868 869 870									
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PROCESSED AND PROPERTIES INDEX

CA

Chemistry of sugar hydrazones and osazones. E. VOTUCEK AND F. VALENTIN. *Archiv. Hem. Farm.* 5, 155 (191-2 French)(1931). -The sugar components can be recognized by boiling the hydrazones with 12% HCl, the hydrazones of a pentose methylpentose yield furfural or methylfurfural and hexose yields neither. The test can be effected microchemically with a few cg. of the sugar hydrazone. In osazone derivs. of disaccharides it can be seen whether a pentose or methylpentose component does or does not constitute the reducing part of the sugar mol. V. and V. measured the rotatory power of the phenylosazone of lactose and its anhydride in MeOH. The first diminishes with time, the second (often higher on account of the anhydride ring) remains const. Due to the smaller soly. of its hydrazone,  $\beta$ -O<sub>2</sub>NC<sub>6</sub>H<sub>5</sub> renders possible an integral solution even where it is incomplete with BrH as in the case of rhodose methylphenylhydrazones. The hydrazone radicals can be replaced by other hydrazone residues, not only in hydrazones, but also often in osazones with the formation of a new osazone either simple or mixed. Thus, fructose methylphenylosazone, treated in the cold with an excess of PhNHNH<sub>2</sub>·AcOH, gives the corresponding phenylosazone, e. g., the  $\beta$ -bromophenylhydrazone would furnish the mixed osazone, HOCH<sub>2</sub>(CH(OH))<sub>2</sub>C(:NNMePh)CH:NNHC<sub>6</sub>H<sub>5</sub>·Br. The theory of Zerner and Waltuch, according to which the inconstancy of rotatory power of osazones is due to the tautomeric change of a dihydrazone form into an azoic form, cannot be maintained, since fructose methylphenylosazone, which does not possess any H susceptible of migration, shows also the phenomenon of mutarotation. J. Krcma

COMMON ELEMENTS

MATERIALS INDEX

ASSOCIATED METALLURGICAL LITERATURE CLASSIFICATION

RESEARCH AND DEVELOPMENT

GROUPS

INDICES

RESEARCH AND DEVELOPMENT

GROUPS

10

*ca*

A new anhydrogalactose, *E. VALMIAN*. *Collection Czechoslov. Chem. Communica-*  
*tions* 4, 364-75 (1952). *3,6-Anhydrogalactose* (I) has been prepd. and differs from those  
 known in the stability of its anhydride ring which even decreases the stability of the  
 original galactose ring. V. compares I to Fischer's 3,6-anhydroglucose (C. A. 6, 1295).  
 On the basis of reducing power, osazone formation, the original pyran ring in galactose.  
 and stereochem. reasons V. assigns to the anhydride ring the 3,6-positions. He notes  
 that models show this configuration to be the only one which would weaken the pyran  
 ring of galactose. He concludes that the ring is thus weakened since I reacts with Schiff's  
 reagent and also shows a change of rotation. A stable 2-ring system should not show  
 mutarotation (Fischer's 3,6-anhydroglucose does not) and V. believes that the new  
 rotation is due to an equil. mixt. of bicyclic and aldehydic forms of I. V. also cites  
 reasons to show that the pyran ring did not change to a furan ring. Anhyd.  $\alpha$ -methyl  
 galactoside in dry pyridine was treated with  $\text{PbCl}_2$ , then with  $\text{Ac}_2\text{O}$ , giving 78% 2,3,4-  
*triacetyl-6-triisopropyl- $\alpha$ -methylgalactoside* (II), m. 170-81°,  $[\alpha]_D^{25}$  6°. By treating II with  
 $\text{PbCl}_2$  in  $\text{CH}_2\text{Cl}_2$  he obtained 70% of the bromohydrin (III), brown and decmpa. 167-  
 168°,  $[\alpha]_D^{25}$  18°. After refluxing a mixt. of III and  $\text{Ba}(\text{OH})_2$  for 2 hrs., 3,6-anhydro- $\alpha$ -  
*methylgalactoside* (IV) was isolated in almost theoretical yield, recrystd. from  $\text{Ac}_2\text{O}$ , it  
 m. 141-2°,  $[\alpha]_D^{25}$  24° (in  $\text{H}_2\text{O}$ ). Hydrolysis of IV with 1%  $\text{H}_2\text{SO}_4$  gave I which has  
 been obtained only in the amorphous state. A water soln. of I was examd. in the  
 polarimeter and the rate of change of rotation was found to follow the equation for a  
 monomol. reaction. Extrapolation of the curve to zero time gave  $[\alpha]_D^{25}$  38.6°. The  
 osazone m. 215°,  $[\alpha]_D^{25}$  48.2° (Me-OH).  
 ANNIE E. WHITE

ABB. 51A METALLURGICAL LITERATURE CLASSIFICATION

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
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*ca*

The glucosylalkylamines (and other aldose alkylamines). E. Votoček and E. Valentin. *Collection Czechoslov. Chem. Communications* 6, 77-90(1934).— These compds. are formed by the condensation of the aldoses with 1 mol. of the primary amine. They crystallize either in the anhyd. condition, with 1 or 0.5 mol. of H<sub>2</sub>O or MeOH depending upon the solvent used. They show mutarotation and must therefore have the lactolic structure. The substituted hydrazines react with the alkylamines to give the hydrazone of the sugar and the corresponding amine. The following alkyl derivs. were prepd. by dissolving approx. 2 g. of the corresponding sugar in an aq. or MeOH soln. of the amine. The alkylamine deriv. crystallizes on standing. *Methylamines:* rhamnosyl, C<sub>11</sub>H<sub>19</sub>O<sub>4</sub>N. 2H<sub>2</sub>O, m. 101°; fucosyl, C<sub>11</sub>H<sub>19</sub>O<sub>4</sub>N. rhamnosyl, C<sub>11</sub>H<sub>19</sub>O<sub>4</sub>N. MeOH, m. N H<sub>2</sub>O, m. 125°; rhamnosyl, C<sub>11</sub>H<sub>19</sub>O<sub>4</sub>N. MeOH, m. 126-7°; glucosyl, C<sub>11</sub>H<sub>19</sub>O<sub>4</sub>N. H<sub>2</sub>O, m. 78-80° (decomp. 115°). *Rhamnoseethylamine, C<sub>11</sub>H<sub>19</sub>O<sub>4</sub>N. 0.5H<sub>2</sub>O, m. 141-2°.* *Propylamines:* rhamnosyl, C<sub>11</sub>H<sub>19</sub>O<sub>4</sub>N, m. 145°; fucosyl, C<sub>11</sub>H<sub>19</sub>O<sub>4</sub>N, m. 124-5°; galactosyl, C<sub>11</sub>H<sub>19</sub>O<sub>4</sub>N, m. 127-8°. *Butylamines:* xylosyl, C<sub>11</sub>H<sub>19</sub>O<sub>4</sub>N. H<sub>2</sub>O, m. 81-2°; rhamnosyl, C<sub>11</sub>H<sub>19</sub>O<sub>4</sub>N. MeOH, m. 136-7°; fucosyl, C<sub>11</sub>H<sub>19</sub>O<sub>4</sub>N. 0.5H<sub>2</sub>O, m. 88-9°; glucosyl, C<sub>11</sub>H<sub>19</sub>O<sub>4</sub>N. H<sub>2</sub>O, m. 97-8°; galactosyl, C<sub>11</sub>H<sub>19</sub>O<sub>4</sub>N, m. 82-3°; mannosyl, C<sub>11</sub>H<sub>19</sub>O<sub>4</sub>N. H<sub>2</sub>O, m. 71-2°. *Amylamines:* rhamnosyl, C<sub>11</sub>H<sub>19</sub>O<sub>4</sub>N. H<sub>2</sub>O, m. 139-40°; fucosyl, C<sub>11</sub>H<sub>19</sub>O<sub>4</sub>N. H<sub>2</sub>O, m. 90-7°; galactosyl, C<sub>11</sub>H<sub>19</sub>O<sub>4</sub>N. H<sub>2</sub>O, m. 110°; mannosyl, C<sub>11</sub>H<sub>19</sub>O<sub>4</sub>N. 0.5H<sub>2</sub>O, m. 70-1°. *Hexylamines:* xylosyl, C<sub>11</sub>H<sub>19</sub>O<sub>4</sub>N. H<sub>2</sub>O, m. 87°; rhamnosyl, C<sub>11</sub>H<sub>19</sub>O<sub>4</sub>N, m. 132-3°; fucosyl, C<sub>11</sub>H<sub>19</sub>O<sub>4</sub>N, m. 100-10°; glucosyl, C<sub>11</sub>H<sub>19</sub>O<sub>4</sub>N. H<sub>2</sub>O, m. 79-80°; mannosyl, C<sub>11</sub>H<sub>19</sub>O<sub>4</sub>N. 0.5H<sub>2</sub>O, m. 75°. *Heptylamines:* rhamnosyl, C<sub>11</sub>H<sub>19</sub>O<sub>4</sub>N. H<sub>2</sub>O, m. 138°; fucosyl, C<sub>11</sub>H<sub>19</sub>O<sub>4</sub>N. 0.5H<sub>2</sub>O, m. 84-5°; glucosyl, C<sub>11</sub>H<sub>19</sub>O<sub>4</sub>N. H<sub>2</sub>O, m. 97°; galactosyl, C<sub>11</sub>H<sub>19</sub>O<sub>4</sub>N, m. 99-100°, softens 80°.

W. A. Moore

METALLURGICAL LITERATURE CLASSIFICATION

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1ST AND 2ND ORDERS PROCESSES AND PROPERTIES INDEX

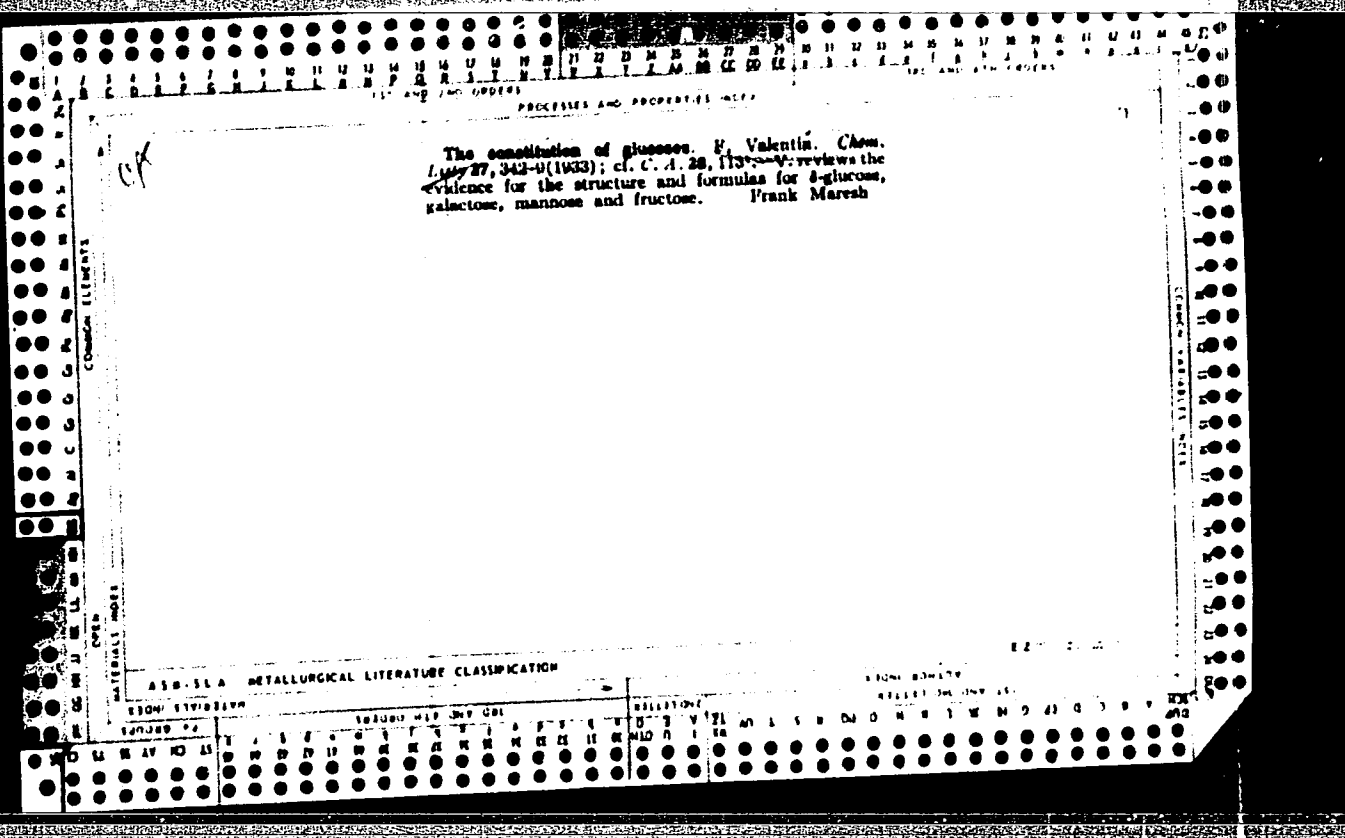
The constitution of glucose. P. Valentin. *Chem. Listy* 27, 275-8, 301-3, 319-25(1933). The constitution of sugars as polyhydroxy aldehydes, butylene oxides and amyrene oxides is reviewed. The stable and unstable forms of their dextro- are discussed in connection with the semiacetal ring. Frank Marsh

COMMON ELEMENTS

OPEN

ASME-51-A METALLURGICAL LITERATURE CLASSIFICATION

3RD 4TH 5TH 6TH 7TH 8TH 9TH 10TH 11TH 12TH 13TH 14TH 15TH 16TH 17TH 18TH 19TH 20TH 21ST 22ND 23RD 24TH 25TH 26TH 27TH 28TH 29TH 30TH 31ST 32ND 33RD 34TH 35TH 36TH 37TH 38TH 39TH 40TH 41ST 42ND 43RD 44TH 45TH 46TH 47TH 48TH 49TH 50TH 51ST 52ND 53RD 54TH 55TH 56TH 57TH 58TH 59TH 60TH 61ST 62ND 63RD 64TH 65TH 66TH 67TH 68TH 69TH 70TH 71ST 72ND 73RD 74TH 75TH 76TH 77TH 78TH 79TH 80TH 81ST 82ND 83RD 84TH 85TH 86TH 87TH 88TH 89TH 90TH 91ST 92ND 93RD 94TH 95TH 96TH 97TH 98TH 99TH 100TH



1ST AND 2ND GROUPS

PROCESSES AND PROPERTIES INDEX

*ca*

The constitution of glucose. *F. Valentin, Chem. Listy 27, 275-8, 301-3, 319-25(1933).*—The constitution of sugars as polyhydroxy aldehydes, butylene oxides and amyleno oxides is reviewed. The stable and unstable forms of their deriva. are discussed in connection with the semiacetal ring. Frank Marsh

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COMMON ELEMENTS

WATER AND INDEX

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ALPHABETIC INDEX

1ST AND 2ND LETTERS

3RD AND 4TH LETTERS

5TH AND 6TH LETTERS

7TH AND 8TH LETTERS

9TH AND 10TH LETTERS

11TH AND 12TH LETTERS

13TH AND 14TH LETTERS

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93RD AND 94TH LETTERS

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99TH AND 100TH LETTERS



PROCESSES AND PROPERTIES INDEX

1ST AND 2ND ORDERS      3RD AND 4TH ORDERS

10

**Synthesis of phenethylpyrazolones.** E. VOJTEK AND E. VALENTIN *Collection Czechoslov. Chem. Communications* 3, 84-90(1938). Phenethylhydrazine reacts like PhNHNH<sub>2</sub> with AcCH<sub>2</sub>CO<sub>2</sub>Rt and its homologs *1-Phenethyl-3-methyl-5-pyrazolone*, m. 134-41.5°; *4-isomeric deriv.*, m. 120°. On reduction with Zn and AcOH and subsequent action of BrH this gives *basal-1-phenethyl-3-methyl-4-amino-5-pyrazolone*, m. 100-8°, which with 8% HCl gives *1-phenethyl-3-methyl-4-amino-5-pyrazolone-2-HCl*. With alkalis the latter gives, in place of the free base, a red oxidized substance, *homorubosonic acid*, C<sub>12</sub>H<sub>14</sub>O<sub>2</sub>N<sub>2</sub>, m. 95-6°. This also seps. from the mother liquors of the benzal deriv. *1-Phenethyl-2,3-dimethyl-5-pyrazolone*, m. 102-3°. A. HOFFMAN

ASB-51A METALLURGICAL LITERATURE CLASSIFICATION

STONI STORISIA      22001 HEP QM QM

MATERIALS INDEX      1ST AND 2ND ORDERS



LIST AND NO CROSS PROCESSES AND PROPERTIES INDEX

A

**Phytochemical notes. I. The glucosides from the gum of Viscaria vulgaris (Lycalis Viscaria L.). E. VOROZNEK AND E. VALMINTIN. Collection Caschodov. Chem. Communications 4, 282-4(1962).—The principal part of the gum of Viscaria vulgaris consists of a polyose or polyoses with a base of d-glucose and d-xylose. R. C. R.**

ADD-51A METALLURGICAL LITERATURE CLASSIFICATION

#	1	2	3	4	5	6	7	8	9	0	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
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PROCESSES AND PROPERTIES INDEX

10

*ca*

The glucosylketimines, tertiary compounds of sugar, ammonia and  $\beta$ -diketones. R. Votreck and F. Valentin. *Collection Czechoslov. Chem. Communications* 7, 201-208 (1955).—Rhamnose, 0.4 g., is dissolved in MeOH and 2.1 g. acetylacetone and 11 cc. MeOH containing 0.1105 g.  $\text{NH}_3$  per cc. is added. *Rhamnosyliminoethylidenacetone*,  $\text{O} \cdot \text{CHMe} \cdot (\text{CH}(\text{OH}))_4 \cdot \text{CHNHCMc} \cdot \text{CHCO}_2\text{Me}$ , crystalline in 2 days; recrystd., m.  $20^\circ$  (decompn.),  $[\alpha]_D -172.5^\circ$ . Ten g. rhamnose is dissolved in MeOH and  $\text{NH}_3$  passed in until the soln. is acid. Upon adding 12.8 g.  $\text{CH}_3\text{Ac}$  and cooling, *Me rhamnosyliminoacetate*,  $\text{O} \cdot \text{CHMe} \cdot (\text{CH}(\text{OH}))_4 \cdot \text{CHNHCMc} \cdot \text{CHCO}_2\text{Me}$  is formed, recrystd., m.  $190-2^\circ$ ,  $[\alpha]_D -125.5^\circ$ . *Et rhamnosyliminoacetate*, similarly prepd. from rhamnose,  $\text{NH}_3$  and  $\text{Ac} \cdot \text{CH} \cdot \text{COEt}$  in EtOH, m.  $185^\circ$ ,  $[\alpha]_D -121.0^\circ$ . *Et rhamnosyliminoethylidenacetate*, m.  $182^\circ$ ,  $[\alpha]_D -112.5^\circ$ , prepd. from  $\text{Ac} \cdot \text{CH} \cdot \text{Me} \cdot \text{COEt}$ . *Me rhamnosyliminoethylidenacetate*, m.  $192.5-3^\circ$ ,  $[\alpha]_D -111^\circ$ , prepd. from  $\text{CH}_3\text{EtAc}$ . *Et rhamnosyliminoethylidenacetate*, m.  $191.5-2.5^\circ$ ,  $[\alpha]_D -107.5^\circ$ , prepd. from  $\text{Ac} \cdot \text{CH} \cdot \text{Et} \cdot \text{COEt}$ . *Et mannosyliminoacetate*, m.  $179^\circ$ ,  $[\alpha]_D 159^\circ$ , prepd. from mannose,  $\text{NH}_3$  and  $\text{Ac} \cdot \text{CH} \cdot \text{COEt}$ .  
P. H. Moser

METALLURGICAL LITERATURE CLASSIFICATION

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
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CA

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Acetone derivatives of xylitol and their constitution. Frantiek Valentin and Dezider Tomkuljak (Slovak Tech. Univ., Bratislava, Czech.). *Chem. Zvesti* 3, 146-64 (1949). --Diacetonexylitol was prepd. and its constitution detd. On treatment with Me<sub>2</sub>CO and concd. H<sub>2</sub>SO<sub>4</sub>, xylitol (I) binds first 1 mol. of Me<sub>2</sub>CO in a 6-membered heterocycle at positions 3 and 5 of the I mol., forming the amorphous moniacetonexylitol, b.p. 145-7°, n<sub>D</sub><sup>20</sup> 1.4778. Prolonging the reaction time and increasing the amt. of the condensation agent gives diacetonexylitol, in which the 2nd mol. of Me<sub>2</sub>C is bound at positions 1 and 2 of the sugar mol., forming a 5-membered heterocycle; the amorphous 1,2,3,5-diacetonexylitol b.p. 90-101°, n<sub>D</sub><sup>20</sup> 1.4534. The following derivs. of I were prepd. by oxidation with Pb(OAc)<sub>2</sub>: 1,2,3,5-diacetone-4-tolylsulfonyl, cryst., m. 71-3°; 3,5-acetone-1,2,4-tribenzoyl, cryst., m. 103-4°; 3,5-acetone-1,2,4-trimethyl, amorphous, b.p. 60-71°, n<sub>D</sub><sup>20</sup> 1.4324; 1,2,4-trimethyl, amorphous, b.p. 97-9°, n<sub>D</sub><sup>20</sup> 1.4610; 1,2,3,5-diacetone-4-methyl, amorphous, b.p. 78-80°, n<sub>D</sub><sup>20</sup> 1.4383; 3,5-acetone-4-methyl, amorphous, b.p. 109-11°, n<sub>D</sub><sup>20</sup> 1.4603; 4-methyl, amorphous, b.p. 167-9°; 1,2,3,5-tetrabenzoyl-4-methyl, cryst., m. 121-3°. Jan Micka

CA

Vitamin C in fresh and canned vegetables. František  
Valentia and Danica Žuffová (Research Inst. Food Ind.,  
Bratislava, Czech.). *Chem. Zvesti* 4, 309-12(1950).—  
Twenty-one various kinds of vegetables in Bratislava region  
was tested by Tillman's method for vitamin C content when  
fresh and canned vitamin C was very much lower in the  
canned vegetables. Jan Miska



CA

Vitamin C in various fruits. Frantíček, Valentin and  
Dana Zúřová (Food Research Inst., Bratislava, Czech.).  
*Chem. Zvesti* 4, 8-13(1950).— Twenty varieties of fruit  
from the Bratislava region were tested for their vitamin C  
by the Tillmans method and compared with the finished  
product. Jan Muka

A

Quantitative separation of magnesium cation from sodium and potassium cations. Prantlček Václav and Magda Suchánová-Toufková (Bratislava, Czech). *Chem. J. Zvesti 6, 68-69 (1950)*. The salts of Na<sup>+</sup>, K<sup>+</sup>, and Mg<sup>2+</sup> is evapd. to dryness with H<sub>2</sub>SO<sub>4</sub> and ignited. After the sulfates are dissolved, freshly prepd. AgOH or Ag<sub>2</sub>O (H<sub>2</sub>O is added). Mg(OH)<sub>2</sub> is adsorbed on the dispersed particles of AgOH.

Jan Miska

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CA

Vitamin C content of tomatoes. Frantiek Valentin  
and Danica Zuffová (Food Research Inst., Bratislava,  
Czech.). *Chem. Zvesti* 3, 340-53(1949).—The effect of  
vegetation period and climatic conditions on vitamin C in  
tomatoes was studied. There were losses of 61.4-85.2%  
in the finished product (catsup) as compared with the  
original tomatoes contg. 15.0-38.00 mg.% of vitamin C  
as detd. by Tillmans method. Jan Micka

Valentin, F.

Vitamins in food research in Slovakia. F. Valentin, D. Žuffová, P. Hanula, M. Čunderliková, and I. Stein (Výsk. ústav potravinárského priemyslu, Bratislava, Czech.). *Průmysl Potravin* 4, 20-4(1953).--In 72 different kinds of vegetables, fruits, oils, fats, and food products the contents of the following vitamins (I) were detd.: A, B<sub>1</sub>, B<sub>2</sub>, E, niacin, and folic acid. More than 450 tabulated values from approx. 5000 tests. are presented. Preventive measures against losses of I in manufg. processes are suggested. L. J. Ucháček

VALENTIN, F.

ry

**CZECH**

Vitamins A (axerophthal) and carotene in raw materials of Slovakian food industry. F. Valentín, D. Žaffová, and M. Čunderlíková (Výzkumný ústav potravního průmyslu, Bratislava, Czech.). *Chem. Zvesti* 8, 267-71(1954); cf. C.A. 49, 625c.—Structural formulas and occurrence of  $\beta$ -carotene in Slovakian fruits and vegetables are discussed. J. M.

VALENTIN, F.

"Vitamin A (axerophtol) and carotenes in basic raw materials of the Slovak food industry."  
Chemicke Zvesti, Bratislava, Vol. 8, no. 5, May 1954, p. 167.

SO: Eastern European Accessions List, Vol. 3, No. 11, Nov. 1954, L.C.

VALENTIN, F.

"Chemistry of Penicillin as an Antibiotic of Today", P. 218, (TECHNICKA  
FPACA, Vol. 6, No. 4, April 1964, Bratislava, Czechoslovakia)

SO: Monthly List of East European Accessions, (EEAL), IC, Vol. 4,  
No. 1, Jan. 1955, Uncl.

VALENTIN, FRANT

Czechoslovakia/Chemical Technology. Chemical Products and Their Application --  
Food industry, I-28

Abst Journal: Referat Zhur - Khimiya, No 2, 1957, 6769

Author: Valentin, Frant

Institution: None

Title: Capsaicin -- The Substance that Imparts the Burning Taste to Red  
Pepper

Original  
Publication: Prumysl potraviny, 1955, 6, No 8, 383-387

Abstract: Data concerning the structure of capsaicin, its occurrence in nature,  
its physiological and pharmacological action and methods for its de-  
termination. Bibliography, 8 references.

Card 1/1



VALENTIN, F.

Coloring matter of paprika. p. 638. CHEMICKE ZVESTI. Bratislava.  
Vol. 9, no. 10, Dec. 1955.

SOURCE: East European Accessions List (EEAL), LC, Vol. 5, no. 3, March 1956.

VALENTIN, F. ; HANULA, F; ARSNAI, J.

Effect of raw materials on the biological quality of corn extracts. p.55.  
CHEMICKÉ ZVESTI. (Slovenska akademija vied a Spolok chemicov na Slovensku)  
Bratislava. Vol 10, no. 1, January 1956.

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

VALENTIN, N.

The circulation speed of current assets in industrial enterprises. p. 70.

METALURGIA SI CONSTRUCTIA DE MASINI

Vol. 8, no. 3, Mar. 1956

Rumania

Source: EAST EUROPEAN LISTS Vol. 5, no. 10 Oct. 1956

BANATIS, J.; VALENTINAKIS, A.

Investigating the increase in the use of  
heat-insulating radi-peat boards. *Architektura*, 1962, No. 1.  
B no.2:253-264 '62.

1. Institut stroitel'stva i arkhitektury SSSR.

VALENTINCIC, Joza, ing. (Beograd, Mladena Stojanovica 4)

Housing construction in the Scandinavian countries and in Yugoslavia.  
(To be contd.) Tehnika Jug 17 no.1:28-31 Ja '62.

(Scandinavia—Housing)  
(Yugoslavia— Housing)

VALENTINCIC, Joz, ing. (Beograd, Mladena Stojanovica 4)

Construction of housing in the Scandinavian countries and in  
Yugoslavia. Tehnika Jug 17 no.2:245-253 F '62.

1. Deputy Secretary for Industry of the Federal Executive Council,  
Beograd.

(Scandinavia--Housing)  
(Yugoslavia--Housing)

VALENTINCIC, M.

Intestinal parasites in Slovenia. Zdrav. vest., Ljubljana 23 no.  
11-12:312-316 1954.

1. Mikrobioloski institut medicinske visoke sole v Ljubljani-  
predstojnik prof. dr. Milica Valentincic.

(PARASITES,  
intestinal, in Slovenia, in child., determ. technic (Slov))

VALENTINCIC, M.; STROPNIK, Z.

Histoplasma capsulatum. Zdrav. vest., Ljubljana 24 no.7-8:273-277  
1955.

1. Mikrobioloski institut medicinske fakultete v Ljubljani-  
predstojnik prof. dr. Milica Valentincic.

(HISTOPLASMA

capsulatum (S1))

(HISTOPLASMOSIS, diag.

(S1))



VALENTINCIC, M.; LEBEZ, D.; VOZELJ, M.

Jakobstahl complement fixation test with cardiolipin antigen.  
Acta med. iugosl. 10 no.1:50-58 1956.

1. Department of Serology, Institute of Microbiology, Medical  
Faculty, University of Ljubljana.

(COMPLEMENT

fixation with cardiolipin antigen in diag. of syphilis,  
Jacobsthal technic.)

(CARDIOLIPIN

antigen complement fixation in diag. of syphilis,  
Jacobsthal technic)

(SYPHILIS, diag.

complement fixation test with cardiolipin antigen,  
Jacobsthal technic)

(ANTIGENS

cardiolipin antigen complement fixation in diag. of syphilis,  
Jacobsthal technic)

VALENTINCO, M.

CZECHOSLOVAKIA / Zooparasitology. Parasitic Protozoa. G-2

Abs Jour: Ref Zhur-Biol., No 20, 1958, 91046

Author : ~~Valenticio, M.~~, Kozak, M.

Inst : Not given

Title : The Dysentery Ameba and Environmental Temperature

Orig Pub: Zdravstv. vestn., 1957, 26, No 26, No 11, 456-457 (Slovenian)

Abstract: No abstract

Card 1/1

EXCERPTA MEDICA Sec 12 Vol 13/6 Ophthalmology June, 59...

969. PYRAZOLIDINE TREATMENT OF ENDOGENIC IRIDOCYCLITIS (Russian text) - Valentinene A. B. - VESTN. OPTALM. 1959, 7<sup>3</sup> (31-36)  
Pyrazolidine, an analogue of butazolidine (pyrazolon derivative), was the drug used by the author in treatment of 50 patients with endogenic iridocyclitis of various aetiology. It is most effective in relieving pain and decreasing inflammation. Acute clinical forms with increased exudation are especially susceptible to treatment by pyrazolidine. Investigation of the permeability of the blood vessels of the anterior portion of the eye in 15 patients demonstrated that this drug promotes normalization of vessel permeability. However, this takes place only after the disappearance of inflammation. Oral administration of the drug in the dose of 0.15 g. t.i.d. gives the greatest effect on the 5th-6th day. However, it is recommended that the treatment be continued up to the 7th-8th day for prophylaxis of early recurrences. At the same time the main endogenic cause of iridocyclitis should be treated. Gastro-duodenal ulcers, diseases of the haemopoietic organs, liver and kidney, insufficiency of the cardiac valves and pronounced arteriosclerosis are contraindications to the use of this drug. There were no complications when the drug was used in the above doses. Pyrazolidine may be employed in out-patient departments, with control of blood and urine data.

VALENTINENE, A. B., Cand Med Sci -- (diss) "Pyrazolidine in the treatment of of iridocyclitis." Moscow, 1960. 16 pp; (Second State Moscow Medical Inst im N. I. Pirogov); 250 copies; free; (KL, 51-60, 120)

VELKEY, Laszlo, dr.; TOTH, Anna, dr.; VALENTINI, Jozsef, dr.

Methemoglobinemia in infants caused by drinking water. Orv.  
hetil. 105 no.5:201-203 2F '64.

1. Borsod megyei Sennelweis Korhaz, I. Gyermekosztaly.

\*

NAZAROV, M.I.; PATRUSHEV, M.F., inz., retsenzent; LEGOSTAYEV, A.M., retsenzent;  
TALMAZA, V.F., retsenzent; VALENTINI, L.A., kand.tekhn.nauk, retsenz-  
sent; KABAKOV, M.M., red.; ANOKHINA, M.G., tekhn.red.

[Paved canals] Moshchenye kanaly. Frunze, Akad.nauk Kirgizskoi  
SSR, 1958. 104 p. (MIRA 12:3)  
(Irrigation canals and flumes)

VALENTINI, L.A., kand.tekhn.nauk; TYAN, V.K., inzh.

Investigating the regimen of bed load flow in small  
mountain rivers. Trudy SANIIRI no.95:3-15 '58.

(MIRA 13:6)

(Sukuluk River--Hydraulics)

VALENTINI, L.A., kand.tekhn.nauk

Construction of earth dams by depositing earth into water.

Trudy SANIIRI no. 98:101-104 '59.

(MIRA 14:1)

(Dams) (Hydraulic engineering)



VALENTINI, L.A., kand.tekhn.nauk

Headworks on mountain and piedmont sections of small rivers.  
Trudy SANIIRI no. 104:3-14 '59. (MIRA 14:1)  
(Hydraulic engineering)

VALENTINI, I.A., kand. tekhn. nauk; DERLYATKA, T.I., inzh.; NAUMENKO, Yu.G.  
inzh.; SHISHORINA, G.I., inzh.

Destruction of the Kugart Dam and its analysis. Gidr. i mel. 13  
no.9:54-61 S '61. (MIRA 14:9)

(Kugart River--Dams)

ARG024060

(N)

SOURCE CODE: UR/0124/66/000/004/B071/B071

AUTHOR: Valentini, L. A.; Derlyatka, T. I.

TITLE: Theory of an oblique hydraulic jump and its practical application

SOURCE: Ref. zh. Mekhanika, Abs. 4B486

REF SOURCE: Sb. Vopr. gidrotekhniki. Vyp. 23, Tashkent, Nauka, 1965, 12-18

TOPIC TAGS: hydraulics, fluid flow, flow analysis

ABSTRACT: The authors examine the problem of conjugate depths and magnitude of the angle  $\beta$  between the direction of the front of a jump and the direction of a turbulent flow in an oblique hydraulic jump arising at the vertical break of the sides of the channel. The equation of the law of conservation of mass and the equation of the theorem of impulses in projections onto the normal to the front of the jump and onto the direction of the front of the jump itself are used. This makes it possible to obtain equations determining the conjugate depths and angle  $\beta$ . Results are shown that the angle  $\beta$  can be found by calculating the propagation velocity of the disturbing wave in a flow of finite depth. Graphic relations for the above-indicated jump parameters are constructed. It is pointed out that the vertical break of the sides of the channel leads to a change in the conditions of the bottom streams of the flow which begin to move in the direction of the jump front. This can be used for reducing the silt saturation of the flow by constructing a special opening for

Card 1/2

ACC NR: AR6024060

discharging the silt. Abstractor's comment. The results obtained by the authors correspond to one case of an oblique jump which is realized provided the front of the jump passes through the site of the break of the channel sides and provided the lengths of the channel sections parallel to the front of the oblique jump are equal on both sides of the front and therefore have a special character. The experiments used by the authors pertain, for example, to the case where the second provision is not fulfilled. [Translation of abstract] V. S. Sinel'shchikov

SUB CODE: 20

Card 2/2

VALENTINOV, A., podpolkovnik

Determination of geodetic data for long-range firing. Voent.  
vest. 41 no.11:79-83 N '61. (MIRA 16:11)

KUKUYEV, Ye.M.; YEFIMOV, V.F.; FLIORIN, B.S., otv.red.; VALENTINOV,  
A.M., red.; ABRAMYAN, A.A., red.; KISELEV, N.A., red.; METLIN,  
V.A., red.; ANDREYEV, G., tekhn.red.

[Handbook with nomenclature and prices for materials and equipment  
used in the coal industry] Nomenklaturnyi spravochnik i tseny na  
materialy i oborudovanie, primenyaemye v ugol'noi promyshlennosti.  
Moskva. Group 2. [Nonferrous metals] TSvetnye metally. 1950.  
275 p. (MIRA 13:4)

1. Russia (1923- U.S.S.R.) Ministerstvo ugol'noy promyshlennosti.  
(Nonferrous metals)  
(Coal mines and mining--Equipment and supplies)

VALENTINOV, A.M.

For firmly establishing measures of economy in all branches of the  
coal industry. Ugol' 29 no.1:7-11 Ja '54. (MLRA 7:1)

1. Nachal'nik Finansovogo upravleniya Ministerstva ugol'noy promyshlen-  
nosti SSSR.

(Coal mines and mining)

VALENTINOV, B. (Krymskaya oblast')

Improving the system of collecting income tax from collective farms. Vop. ekon. no.3:154-156 Mr '62. (MIRA 15:3)  
(Nishnegorskiy District--Collective farms--Taxation)



VALENTINOV, B.

We are helping collective farmers to organize their finances.  
Fin.SSSR 37 no.4:66-68 Ap '63. (MIRA 16:4)

1. Starshiy inspektor gosudarstvennykh dokhodov Nizhnegorskogo rayonnogo finansovogo otdela Krymskoy oblasti.  
(Nizhnegorskiy District--Collective farms--Finance)

VALENTINOV, G.

Propagandist of aeronautical knowledge. Kryl. rod. 16 no.2:26  
F '65. (MIRA 18:3)

VALENTINOV, I.

Africa - Social Conditions

"Stories about Africa." Vokrug Sveta no. 5, '52.

2

9. Monthly List of Russian Accessions, Library of Congress, July 195~~4~~. Unclassified.

VALENTINOV, N.

USSR/Radio - Trade Organization

Dec 51

"Concerning the Work of 'Soyuzposyltorg,'" N. Valentinov

"Radio" No 12, pp 14, 15

Finds the following defects in the work of "Soyuzposyltorg": poor assortment of receivers (only the Moskvich and Rodina were available in 1951), delay in filling orders (40-50 days), high shipping costs (set of batteries for the Rodina receiver priced at R 101.20 cost 78 rubles to ship), and poor advertising of available radio parts.

208T83

1. VALENTINOV, N.
2. USSR (600)
4. Radio, Short-Wave
7. Master radio amateurs, Radio No. 1, 1953.

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

VALENTINOV, N

107-5-22/54

AUTHOR: Valentinov, N.

TITLE: The Victory of Soviet Sportsmen. International Encounters  
(Pobeda sovetskikh sportsmenov. Mezhdunarodnyye vstrechi)

PERIODICAL: Radio, 1956, Nr5, pp. 22-23 (USSR)

ABSTRACT: Over 500 duplex radio amateur stations and hundreds of receiving stations took part in the IV International Short-Wave Ham Contest which was organized by the League of Friends of Soldier of the Polish People's Republic. There were hams from Bulgaria, Hungary, East Germany, Poland, Romania, Czechoslovakia, and USSR. The subject of contest: telephone and telegraph duplex radio communication.

The Chief Umpire Board worked in Warsaw and consisted of the following members: A. Yeglinski SP1CM (Poland), K. Nesterov LZ2KAC (Bulgaria), T. Matusek SP6XA (Poland), P. Vasilesku YO6VG (Romania), N. Kazanskiy YA3AΦ (USSR), Kaminek, K. OK1CX (Czechoslovakia), I. Yezerski SP2SJ (Poland).

Soviet hams won the first place in the contest. Among them:

Operator of the Kiyev radioclub Y55KAA, and of the Saratov radioclub YA4K4E; L. Labutin of Moscow YA34P; operator of the Dnepropetrovsk radioclub Y55KAD; Yu. Chernov of Saratov YA44B; A. Shchennikov of Pensa YA4Φ4; operator of the Taganrog Radiotechnical Institute YA6KOD;

Card 1/2

VALENTINOV, N.

Forward in force. Radio no.9:7-8 S '56.  
(Radio, Shortwave--Competitions)

(MLBA 9:11)

MADZHAROV, D.I.; VALENTINOV, H.

Electrocardiographic changes following anesthesia in children.  
Vest. khir. no.10:91-93 '64. (MIRA 19:1)

1. Iz nauchno-issledovatel'skogo instituta vosstanovitel'noy  
khirurgii, protezirovaniya i trudoustroystva (dir. - doktor  
Iv. Iliyev), Sofiya, Bolgariya.



VALENTINOV, N., inzh.

Lighting will be cheaper. Izobr.i rats. no.4:8-11 Ap '60.  
(MIRA 13:6)  
(Electric lamps)

VALENTINOV, N., inzh.; NOVINSKIY, G., vrach

An invention should subsist. Izobr.i rats. no.12:16-18 D '60.

(MIRA 13:12)

(Medical instruments and apparatus--Technological innovations)

KYARDI, Ya., brigadir (g.Tallin); KAPRANOV, G. (g.Mal'chik); KNYAZEV,  
Yu. (g.Mal'chik); SHAPKUN, N., inzh. (g.Krasnodar); KHOKHLOV,  
Yu. (g.Ural'sk); VALENTIKOV, N., inzh.; HOVINSKIY, G., vrach

Innovations. Izobr. i rsts. no.9:12-13 S '61. (MIRA 14:8)

1. Machal'nik tekhnicheskogo otdela zavoda imeni Zemlyachki,  
g. Ural'sk (for Khokhlov).

(Technological innovations)

VALENTINOV, N. (Alma-Ata)

Photographic clubs have not yet been organized in Alma-Ata.  
Sov. foto 19 no.5:26-27 My '59. (MIRA 12:9)  
(Alma-Ata--Photography--Societies, etc.)

VALENTINOV, Oleg

The Fifth Congress of the Trade Unions of Czechoslovakia. Vsem.  
prof. dvizh. no.7/8:35-37 JI-Ag '63. (MIRA 16:10)

VALENTINOV, R.; NIKOLAYEV, I.

In primary schools, institutes of higher learning and at practical  
training. Sov.foto 22 no.9:42-43 S '62. (MIRA 15:8)  
(Photography)

VALENTINOV, R.; IGOREV, N.

Let's talk about your photographs. Sov. foto 23 no.4:42-44  
Ap '63. (MIRA 16:5)

(Photographs)

VALENTINOV, V.

Metal workers strike. Sov.profsoiuzy 5 no.3:87-88 Mr '57.  
(MLRA 10:4)

(Schleswig--Holstein--Strikes and lockouts--Metal workers)



VALENTINOV, V.

It does not suit anybody. Izobr.i rats. no.9:46-47 S '60.

(MIRA 13:10)

(Technological innovations)

VALENTINOV, V.

Callisthenics in industry. Okhr. truda i sots. strakh. 4  
no. 2:50-51 F '61. (MIRA 14:2)  
(Callisthenics)

30900. VALENTINOV, Ye.

Vospitaniye meditsinskoy sestry. (Shkola pri bol'nitse im. Ostroumova).  
Med. sestra, 1949, No. 9, s. 30-32.

VALENTINOV, Ye. (g. Kuybyshev)

Here they repair motor vehicles. Prom.koop. 12 no.11:15  
N '58. (MIRA 11:11)  
(Kuybyshev-Automobiles-Maintenance and repair)

*Valentiny Yu*

PHASE I BOOK EXHIBITION SCV/A020

Atmosphere, stormy state. Pashin diva ruvovditeley avtomaticheskoy  
 Nym knuzikov i uchastkov (Research Modeling Collection of Articles,  
 Yearbook for Institute of Model Aircraft Clubs and Teachers)  
 Moscow, Gompelitz, 1960. 311 p. 12,000 copies printed.

Compilers: K. B. Mikheyev, Candidate of Technical Sciences, and  
 N. S. Lashchinsky, Candidate of Technical Sciences; Ed.:  
 A. Ye. Stechnuruky; Tech. Ed.: V. I. Korneyeva.

PURPOSE: This book is intended for instructors and directors of  
 model airplane clubs sponsored by DOKMOP (All-Union Voluntary  
 Society for Promotion of the Army, Navy, and Air Force).

COVERPAGE: The book consists of 17 articles covering various aspects  
 of model aircraft design, construction and operation. The text  
 contains many illustrations and diagrams. No personal titles are  
 mentioned. There are 185 references, all Soviet.

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SCHWARTZ, E.; VALENTINOVA, I.; SIMKOVA, V.; DORNETZHUBER, V.

Determination of the biological effect of gibberellic acid  
in guinea pigs with some biochemical methods. Bratisl. lek.  
listy 44, no. 10:621-627 30 N '64

1. Krajska nemocnica tuberkulozy a chorob plucnych. (riaditel  
MUDr. K. Virsik), a Ustav tuberkulozy v Bratislave (riaditel  
MUDr. J. Markovic).

WENFA, Rudolf, Ing.; VALENTINOVA, Ingrid, prom. biochemik.

Spraying of sugar beets with scatox 20. Pracovni lek. 9 no.2:144-146  
Apr 57.

1. Ustav hygieny prace a chorob z povolania v Bratislave, riaditel  
MUDr I. Klucik.

(PARATHION,  
spraying of sugar beets (Cz))

VALENTINOVA, I.

JANOK, J., RNDr. Prom biochem.; MAJEROVA, Zd., Prom biochem.; VALENTINOVA, I., Ing.;  
MASEK, J., Ing.; TICHY, V., Ing.

In vitro anticholinesterase effect of coumarin dialkylphosphoric &  
dialkylthiophosphoric acid esters. Pracovni lek. 9 no.6:506-512 Dec 57.

1. Ustav hygieny prace z chorob z povolania v Bratislave, prednosta MUDr.  
I. Klucik Vyskumny ustav agrochemickej technologic v Bratislave. J. J.  
Bratislava, Ustav hygieny prace.

(COUMARIN, eff.

dialkylphosphoric & dialkylthiophosphoric acid esters, in  
vitro anticholinesterase ff. (Cz))

(CHOLINESTERASE, antag.

coumarin dialkylphosphoric & dialkylthiophosphoric acid esters  
in vitro (Cz))



CZECHOSLOVAKIA/Chemical Technology - Pesticides.

H.

Abs Jour : Ref Zhur - Khimiya, No 16, 1958, 54969

Author : Tikhly, Rattay, Yanok, Valentinova

Inst : -

Title : Mixed Esters of Pyrocatechine, Phosphoric and Thiophosphoric Acid Derivatives.

Orig Pub : Chem. zvesti, 1957, 11, No 7, 398-410

Abstract : From the reaction of 1,2-phenylene chlorothiophosphate with sodium alcoholates, the following compounds of the general formula,  $1,2-C_6H_4(O)_2P(S)OR$ , were synthesized

(given are: R, yield of the crude material in %, m. p.

in °C.,  $n_D^{20}$ ,  $d_4^{20}$ ) :  $C_6H_5$ , 90.7, 71-71.5; -, -;

$C_6H_4NO_2-P$ , 97.3, 88, -, -;  $C_6H_4NO_2-O$ , 97.6, 141.5-142,

Card 1/3

CZECHOSLOVAKIA/Chemical Technology - Pesticides.

H.

Abs Jour : Ref Zhur - Khimiya, No 16, 1958, 54969

-, -;  $C_6H_4Cl-o$ , 99.3, 125.5, -, -;  $C_6H_4OCH_3-o(1)$ , 73.6,  
86.5-87.5, -, -;  $C_6H_3Cl_2-2',4'$ , 92.0, 80.0, -, -;  
4'-methyl coumarinyl-7' (II), 92.8, 146, -, -;  $C_2H_5$ ,  
70.4, -, 1.5622, 1.2954;  $P(S)(OC_3H_7-n)_2$  (III), 87.8,  
-, 1.5311, 1.2514.  
Treating 1,2- $C_6H_4(ONa)_2$  with  $(C_2H_5O)_2PSCl$ , a 94.9%  
yield of 1,2-phenylene-bis-(o,o-diethyl) thiophosphate  
(IV) was obtained, b. p. 110°C./0.1 mm.,  $n_D^{20} = 1.5110$ ,  
 $d_4^{20} = 1.2610$ . In the reaction of pyrocatechin with

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H.

Abs Jour : Ref Zhur - Khimiya, No 16, 1958, 54969

dialkyl chlorophosphate in the presence of sodium carbonate, 1,2-phenylene-bis(dialkyl)-phosphates are formed (given are: alkyl, yield in %, b. p.

in °C./mm.,  $n_D^{20}$ ,  $d_4^{20}$ ) :  $C_2H_5$ , 36.0, 112-116/0.08, 1.4679,

1.2110 n- $C_3H_7$ (V), 28.6; 114-118/0.035 (decomposes);

1.4815, 1.1709 iso- $C_3H_7$ , 41.2, 112-116/0.05, 1.4715,

1.1581.

The most active insecticides for *Musca Domestica* are compounds III-V. The  $I_{50}$  for cholinesterase in the plasma (CP) and the erythrocytes (E) of human blood was determined. CP was the most sensitive to the esters obtained, and only II is active upon CP and E. I has a selective action upon CP.

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Mar 58.

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MUDr I. Klucik.

(PHOSPHATES, effects,

O, O-dialkyl-S-(N, N-dialkylthiocarbamyl)-dithiophosphate,  
cholinesterase inhib. in vitro (Cz))

(CHOLINESTERASE, antagonists,

O, O-dialkyl-S-(N,N-dialkylthiocarbamyl)-dithiophosphate,  
in vitro (Cz))

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Neoplastic transformation of rat embryo fibroblasts by fowl  
sarcoma virus B77. Neoplasma (Bratisl.) 12 no.4:453-458 '65.

1. Oncological Research Institute, Bratislava, Czechoslovakia.  
Submitted April 28, 1965.

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Excretion of neutral 17-ketosteroids and chlorides during septic diseases of infants in the first months of life. Vop. okh. zat. i det. 5 no.6:39-44 N-D '60. (MIRA 13:12)

1. Iz kafedry fakul'tetskoy pediatrii (zav. - deystvitel'nyy chlen AMN SSSR, zaslužbenyy deyatel' nauki, prof.M.S.Maslov) Leningradskogo meditsinskogo pediatricheskogo instituta (direktor - prof.N.Š.Shutova).  
(INFECTION) (STERIODS) (CHLORIDES IN THE BODY)

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Dynamics of 17-ketosteroid excretion in kidney diseases in  
children. *Pediatrics* 38 no.2:13-18 F '60. (MIRA 13:12)  
(STEROIDS) ; (KIDNEYS—DISEASES)

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(RICKETS)



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[Multivolume manual on pediatrics] Mnogotomnoe rukovodstvo po pediatrii. Moskva, Medgiz. Vol.4. [Diseases of the digestive tract. Diseases of the liver and skin. Vitamins and vitamin deficiency diseases] Zabolevaniia pishchevritel'nogo trakta. Bolezni pochek i kozhi. Vitaminy i bolezni vitaminnoi nedostatochnosti. Red. toma E.N.Khokhol. 1963. 721 p. (MIRA 17:2)

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GONCHAROV, P.P., red.; KLIORIN, A.I., red.; SHUTOVA, N.T., red.;  
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Tur).

(PEDIATRICS)



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**5267\* Experimental Work Operation of Electric Furnaces With Screen Insulation.** (In Russian.) K. A. Valentinovich. *Promyslennaya Energetika (Industrial Power)*, v. 7, Dec. 1950, p. 6-8.

Presents results of experiments in which screen insulation replaces the standard brick structure with refractory lining. The brick walls are replaced by a series of thin screens of metal and ceramic material having air spaces between them. Results indicate that such furnaces heat up many times faster than ordinary furnaces, resulting in about 40% decrease of electric-power consumption and considerable reduction in maintenance costs. Includes diagrams.

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PROPERTY LETTERS  
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