

PROCESSES AND PROPERTIES INDEX

B-III-2

BC

Composition of sugar-beetroot "bolters" and capping experiments in 1936. J. PÁZLER and A. RUŽIČKA (Z. Zuckerind. Czechoslov., 1937, 62, 120—132; cf. B., 1934, 902).—Compared with normal beets, "bolters" had a much lower average wt. of root, a rather lower % of sugar, and the same or rather higher purity of juices. "Capping" the "bolters" in July, i.e., cutting off their flower stalks about 3—4 in. above the root crown, had a very unfavourable effect, lowering the wt. of roots harvested, their sugar content, and the purity of their juice.

J. H. L.

METALLURGICAL LITERATURE CLASSIFICATION

RUZICKA, Arnost, MUDr. Z. doc.

Silver amalgam as filling material. Prakt. zub. lek., Praha 2 no.  
8:169-174 1954.

1. Z kliniky pre choroby zubne a celustne v Kosiciach  
(DENTAL MATERIALS  
amalgam, silver, as filling material)

RUZICKA, A.

K. SANDERA, Z. Zuckerind Czechoslov, 1930, 55, 9-14

RUZICKA, Bohuslav; REHOR, Frantisek

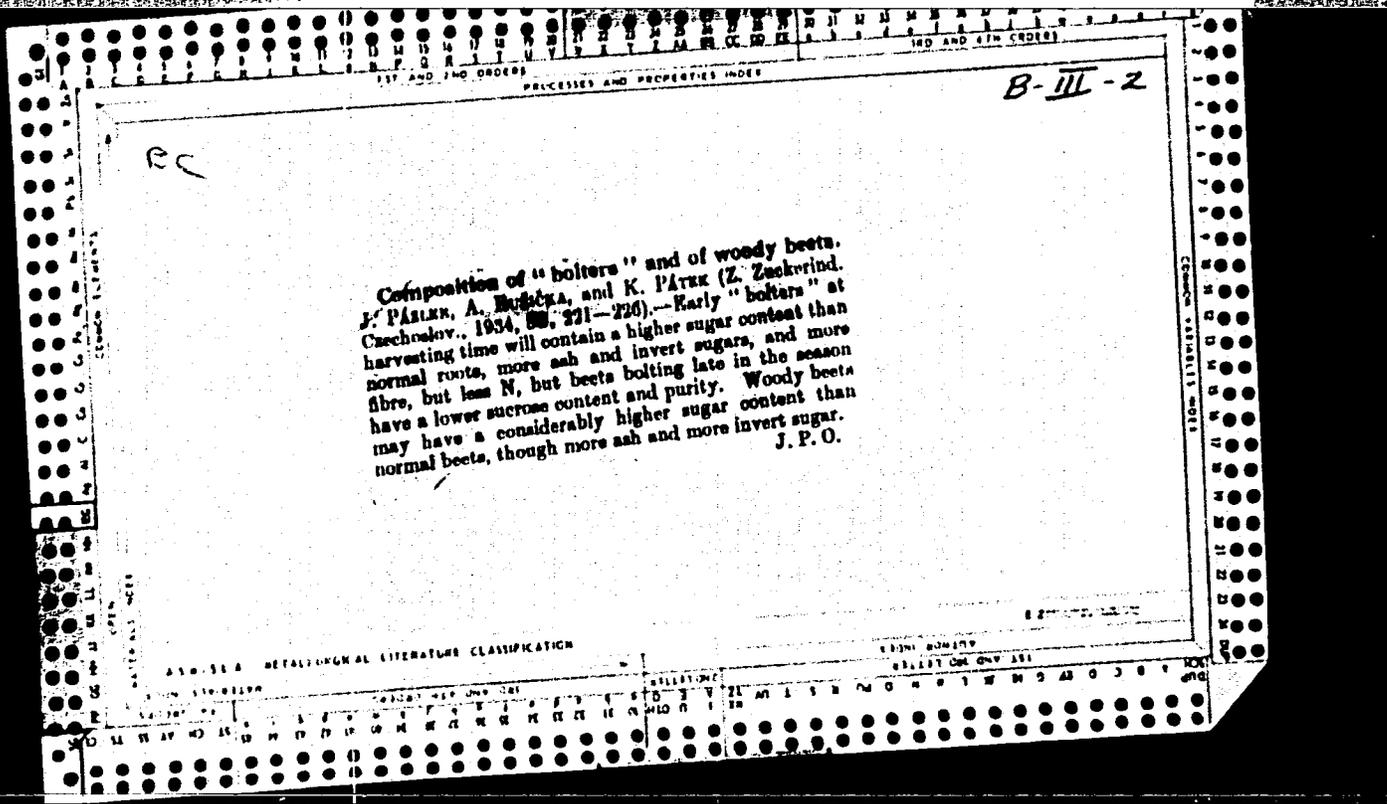
Parathyris n. gen., a new pelecypod from the Ostrava-Karvina coal district (Pelecypoda). Vest ust geol 39 no.2:137-140  
Mr'64.

1. Katedra geologie a paleontologie, Vysoka skola banska,  
Ostrava; Uhelny pruzkum, Ostrava.

PROCEEDINGS AND PROPERTIES INDEX

A report upon the comparative experiments with beet seeds conducted by the Central Society of the Czechoslovakian Sugar Industry during 1934. I. The sugar beet harvest, content of sugar and yield of sugar. Josef Pátek, A. Rušička, J. Dědek, J. Vašátko and F. Dolák. *Listy Cukrovar.* 53, 170-89; *Z. Zuckerind. Tschoslovak. Rep.* 59, 200-31(1935). -- Nine varieties of sugar beets were grown in 20 exptl. plots in the regions of the republic where sugar beets are grown regularly. The beets were harvested and analyzed chem., but the results from only 12 plots were suitable for comparative statistical analyses. The av. wts. of beet roots in q. per ha. were: Dobrovice V 381.1 ± 2.24, Dobrovice N 371.4 ± 1.23, Kleinwanzleben N 370.5 ± 0.72, Dobrovice C 367.4 ± 1.01, Zapotil N 364.2 ± 0.94, Zapotil Z 362.2 ± 1.20, Wohanka ZR 354.8 ± 1.40, Selecta 343.3 ± 0.87 and Kleinwanzleben Z 332.4 ± 2.40. The sugar contents in percentage for the beets were: Wohanka ZR 20.45 ± 0.040, Dobrovice C 19.99 ± 0.024, Kleinwanzleben Z 19.80 ± 0.050, Dobrovice N 19.78 ± 0.026, Zapotil Z 19.78 ± 0.026, Selecta 19.75 ± 0.048, Dobrovice V 19.07 ± 0.038, Kleinwanzleben N 19.06 ± 0.026 and Zapotil N 19.63 ± 0.040. The av. yields of sugar in q. per ha. were: Dobrovice V 74.92 ± 0.62, Dobrovice C 73.42 ± 0.23, Dobrovice N 73.39 ± 0.26, Kleinwanzleben N 72.80 ± 0.21, Wohanka ZR 72.63 ± 0.32, Zapotil Z 71.58 ± 0.32, Zapotil N 71.41 ± 0.27, Selecta 67.76 ± 0.28 and Kleinwanzleben Z 65.77 ± 0.53. Tables give the soil analysis, weather conditions and the analysis for each variety at every exptl. plot. Frank Marresh

ASD 35 A METALLURGICAL LITERATURE CLASSIFICATION



CO

I. A report on comparative experiments with beet seeds conducted by the Central Society of the Czechoslovakian Sugar Industry during 1934. II. Solids in the beet juice and the quotient of purity. Josef Páizer and Ant. Rudlka. *Lesný Cukrovar*, 53, 2:9-66(1935); cf. C. A. 29, 4964.

Beets harvested on 12 expl. plots throughout Czechoslovakia showed av. solid contents in the digested juice as follows: Wohanka ZR 23.03, Kleinwanzleben Z, 22.47, Dobruvice C 22.46, Selecta 22.28, Zapotil Z 22.28, Dobruvice N 22.25, Kleinwanzleben N 22.18, Zapotil N 22.15 and Dobruvice V 22.03%. The av. sugar concns. were: Wohanka ZR 20.45, Dobruvice C 19.09, Kleinwanzleben Z 19.80, Dobruvice N 19.78, Zapotil Z 19.78, Selecta 19.75, Dobruvice V 19.07, Kleinwanzleben N 19.06, and Zapotil N 19.03%. The quotients of purity for the av. values were: Dobruvice V 80.31, Dobruvice C 89.08, Dobruvice N 88.97, Wohanka ZR 88.84, Zapotil Z 88.79, Selecta 88.70, Kleinwanzleben N 88.68, Zapotil N 88.66 and Kleinwanzleben Z 88.17. The order of the varieties changed for the different analyses, and to correct the sugar concn. P. multiplied the sugar concn. by the ratio of the quotient of the particular variety over the highest quotient. The corrected concns. are more useful to beet growers, although the max. correction was -0.14%.

v8

III. The determination of the harmful amino nitrogen by the Stanek-Pavlas method. *Ibid.* 267-73.—The beets on 8 plots in various regions of the country and for 9 varieties showed 30.78-45.07 mg. amino N per 100 parts of beet roots and 0.182-0.225 mg. per 100 parts of sugar. However, the standard deviation of the amino N detns. was 10 times as large as that for the sugar concn. detns. and 4 times as large as that for the yield of beet roots. The amino N detns. of the varieties used could not be correlated to the sugar concn. of the same varieties. Those varieties which possessed large fresh greens at harvest time had a low amino-N content; those which had small and withered greens were high in amino N; for intermediate values the correlation did hold. The order of the varieties changed when the results were expressed in terms of beet yield or sugar yields of 100 g. The values for amino N were more characteristic for the various plots than for the various varieties. Fertilizers, both artificial and natural, had an effect upon the amino N of the beets, but it was modified by the character of the soil, length of the season, transpiration, etc. On 3 plots the total N by the Kjeldahl method for all varieties was 221-270, the amino N 53-61.5 mg. per 100 parts of beet; or 23-28.2% of the total N. A direct relation between the total N and amino N could not be tabulated.

Frank Mareš



A report on the comparative experiments with beet seeds conducted by the Central Society of the Czechoslovak Sugar Industry in 1937. J. Pálek, Ant. Rábeka, Vinc. Michal and Jar. Cerný. *Listy Cukrovar* 57, 85-116 (1938).—Ten beet varieties were grown, harvested and analyzed separately from 15 exptl. plots distributed throughout Czechoslovakia. The report includes tables showing soil analyses (particle size,  $\text{CaCO}_3$ , N,  $\text{P}_2\text{O}_5$  and K content), seed analyses (moisture, impurities, size, germinating power, sp. wt.), and field conditions (beets per acre, no. of decedent beets, pptn. per month, previous crop, fertilizers used) for each plot and each beet variety. Frank Marsh

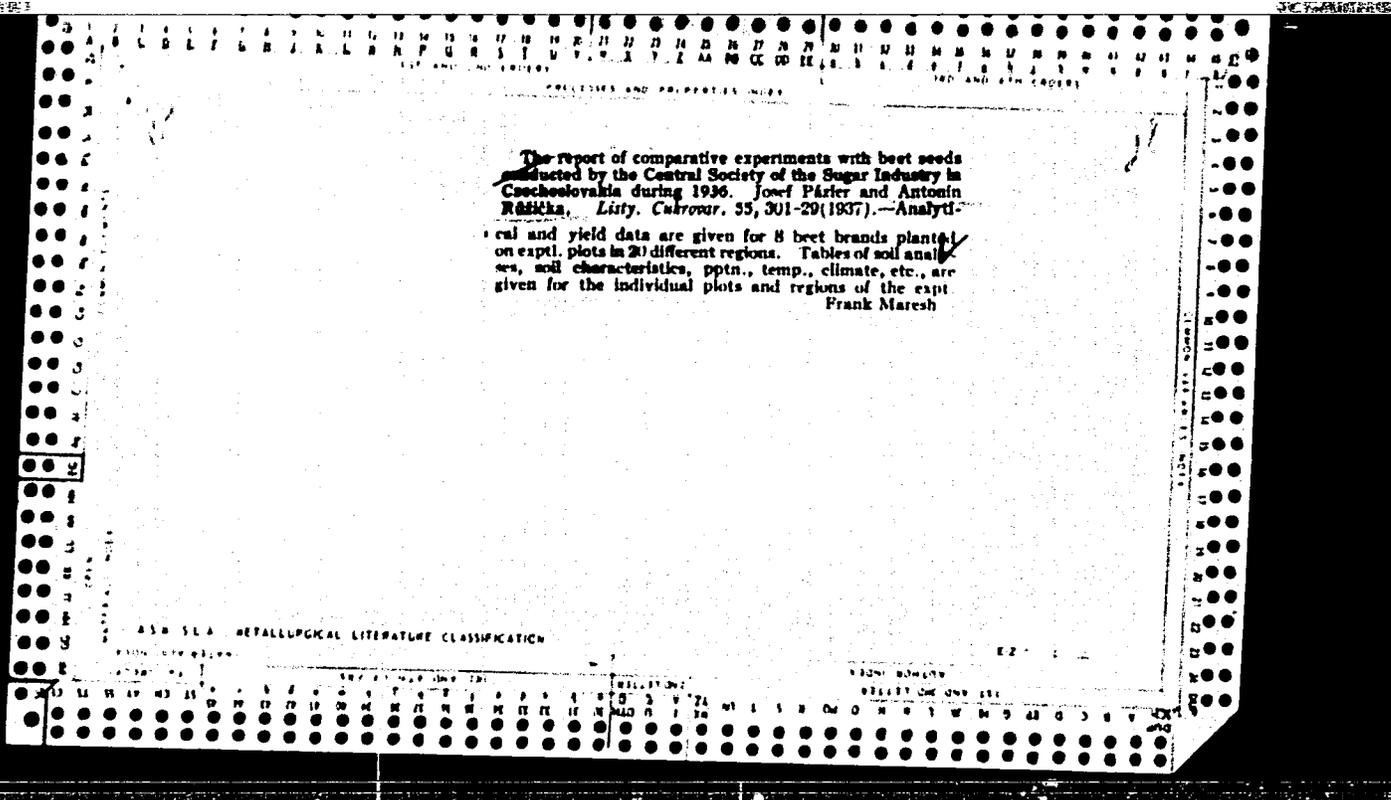


PROCESSES AND PROPERTIES INDEX

A report on the comparative experiments with beet seeds conducted in 1935 by the Central Society for the Sugar Industry in Czechoslovakia. I. The beet harvest, the sugar concentration and the sugar yield. Josef Pázel and Antonín Růžička. *Listy Cukrovar.* 54, 241-71 (1936); *Z. Zuckerind. Czechoslovak Rep.* 60, 257-89. Frank Mareš

METALLURGICAL LITERATURE CLASSIFICATION

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PROCESSED AND PROPRIETARY INDEX

28

The composition of sugar-beet brands in comparative experiments during 1935 and 1936. I. The dry substance of beet juices and the quotient of purity. Josef Pázel and Antonín Rálikka. *Listy Cukrovár. 56, 21-32 (1937)*.--Nine beet brands grown on 16 exptl. plots in different beet-growing regions of Czechoslovakia were harvested and analyzed for the sugar content, and for the total solid substances in the filtered juices. The statistically averaged sugar contents for the 16 plots during 1935 and 1936 are given. Tables give the individual analyses for each brand on each exp. plot for both years. P. M.

A 5 0 - 3 5 4 METALLURGICAL LITERATURE CLASSIFICATION

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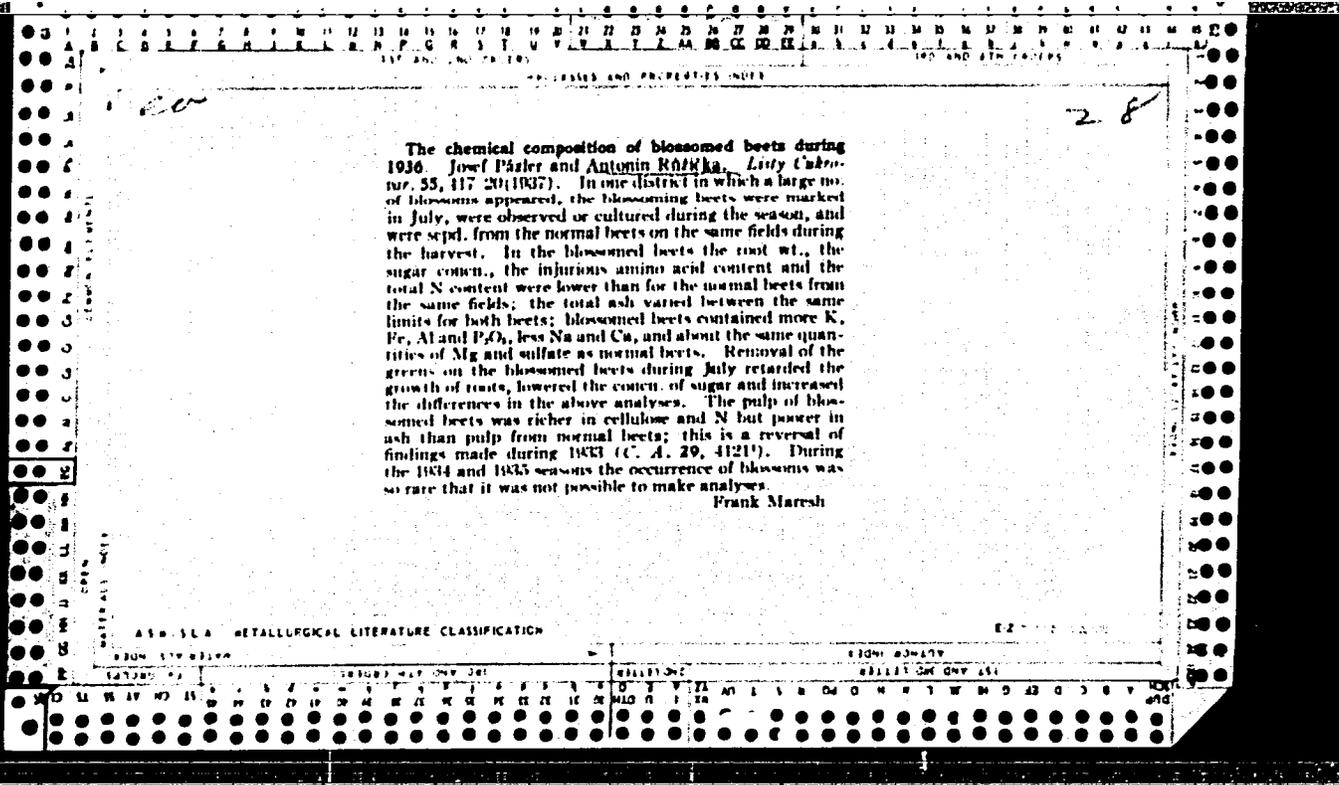
PROCESSES AND PROPERTIES INDEX

28

The composition of beet brands tested in the comparative experiments of 1935 and 1936. III. The specific conductivity of digested beet juices and the correlation factors based upon ash content. Josef Párek and Antonín Růžička. *Listy cukrovic*, 56, 187-202(1938); cf. C. I. 32, 51837. The 9 beet brands grown on 15 expt. plots throughout Czechoslovakia in 1935 and 1936 were analyzed for sp. elec. cond. and for ash. The sp. cond. of the digested beet juice varied more than the sugar content or the solids detid. with a refractometer but varied less than the injurious amino acid N. In 1935 and in 1936, resp., the standard deviations ranged for the sp. cond. between 0.93-3.27% and 1.05-2.81%, sugar content 0.35-0.91% and 0.39-0.66%, dry matter 0.37-0.79% and 0.37-0.71% and injurious amino acid N 2.05-7.69% and 2.93 and 13.49%. These statistical averages also held for the individual plots and brands. No relation existed in the order of brands arranged according to their sp. cond. for the 2 consecutive years. Attempts to relate the sp. cond. of the digested beet juices through correlation factors to the total ash, sol. carbonate ash, corrected sulfate ash, ratio of the sulfate ash to the carbonate ash, sugar content, dry matter, total N, injurious amino acid N and quotients of purity were not very successful. In general, the influence of the individual plot with its soil, climate, etc., dominated over all of the other, analytical factors. Complete tables of the analyses and the correlation coeff. are given for the individual brands and for the individual plots.

Frank Mareš

A 50-51A METALLURGICAL LITERATURE CLASSIFICATION



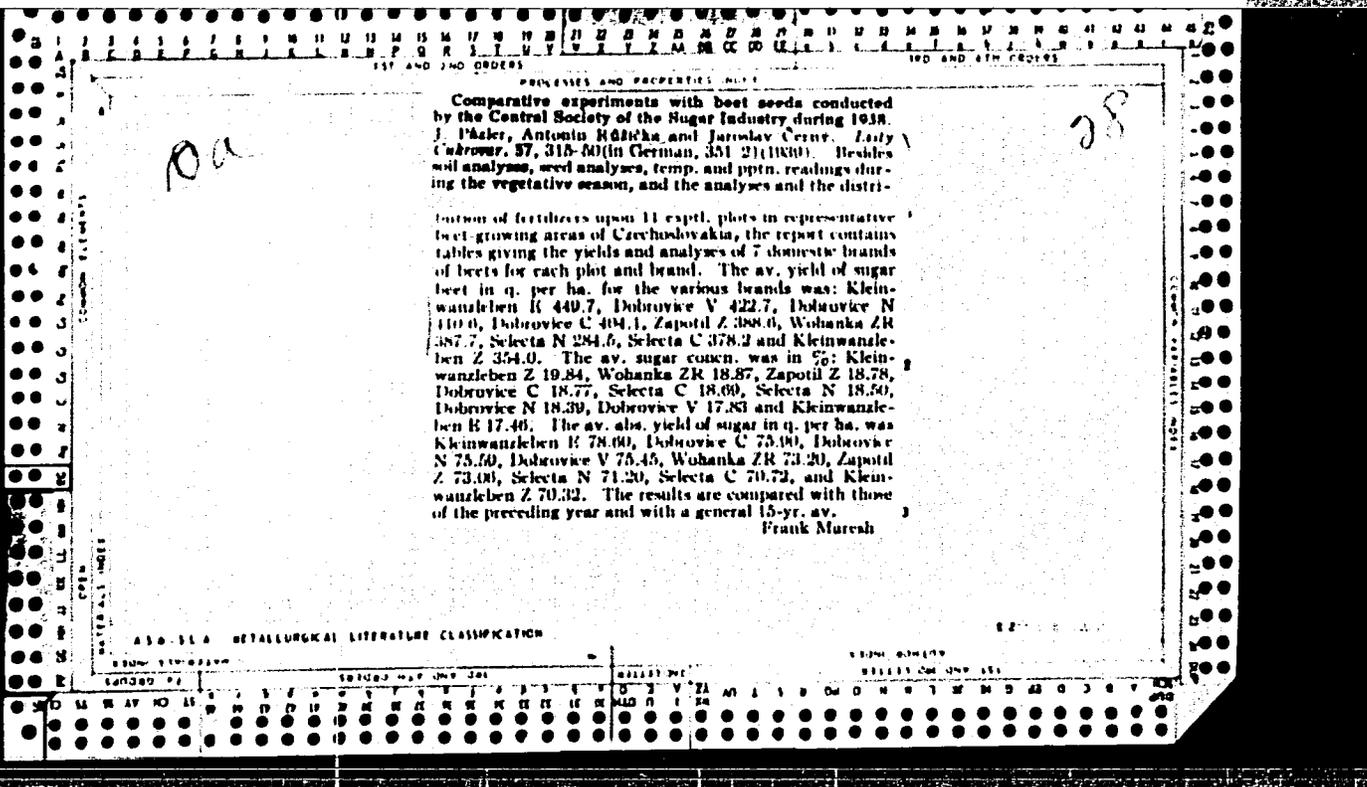
PROCESSES AND PROPERTIES INDEX

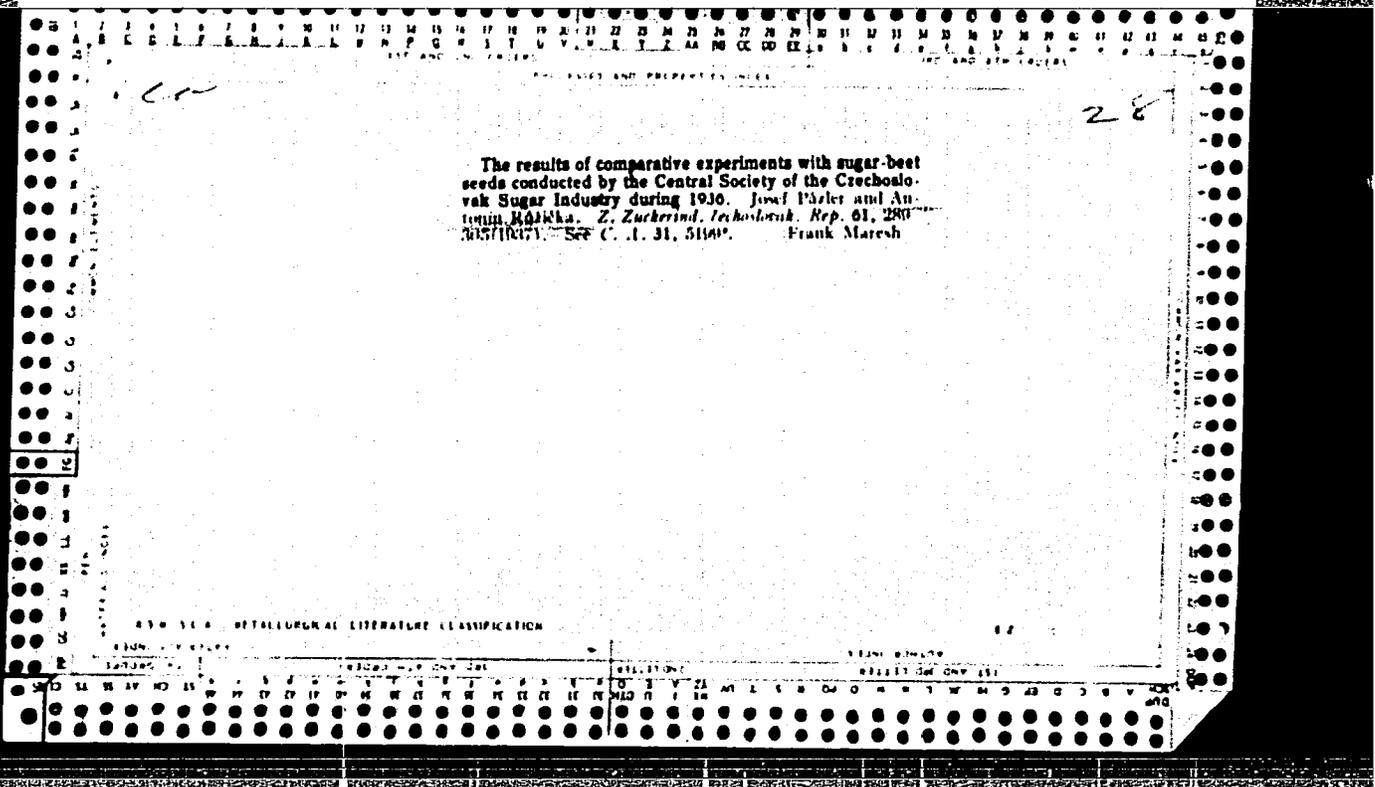
28

The comparative experiments of the years 1935 and 1936. I. The dry substance of the digested beet juices and their quotients of purity. Josef Payer and Antonin Růžicka. *Z. Zuckerind. Technol. Rep.* 62, 311 S. (1935); cf. C. I. 32, 3811. II. The injurious amino acid nitrogen and the total nitrogen. *Ibid.* 225-32, 231 (1935); cf. C. I. 32, 3150. Frank Marsh

METALLURGICAL LITERATURE CLASSIFICATION

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 AA AB AC AD AE AF AG AH AI AJ AK AL AM AN AO AP AQ AR AS AT AU AV AW AX AY AZ BA BB BC BD BE BF BG BH BI BJ BK BL BM BN BO BP BQ BR BS BT BU BV BW BX BY BZ CA CB CC CD CE CF CG CH CI CJ CK CL CM CN CO CP CQ CR CS CT CU CV CW CX CY CZ DA DB DC DD DE DF DG DH DI DJ DK DL DM DN DO DP DQ DR DS DT DU DV DW DX DY DZ EA EB EC ED EE EF EG EH EI EJ EK EL EM EN EO EP EQ ER ES ET EU EV EW EX EY EZ FA FB FC FD FE FF FG FH FI FJ FK FL FM FN FO FP FQ FR FS FT FU FV FW FX FY FZ GA GB GC GD GE GF GG GH GI GJ GK GL GM GN GO GP GQ GR GS GT GU GV GW GX GY GZ HA HB HC HD HE HF HG HH HI HJ HK HL HM HN HO HP HQ HR HS HT HU HV HW HX HY HZ IA IB IC ID IE IF IG IH II IJ IK IL IM IN IO IP IQ IR IS IT IU IV IW IX IY IZ JA JB JC JD JE JF JG JH JI JJ JK JL JM JN JO JP JQ JR JS JT JU JV JW JX JY JZ KA KB KC KD KE KF KG KH KI KJ KL KM KN KO KP KQ KR KS KT KU KV KW KX KY KZ LA LB LC LD LE LF LG LH LI LJ LK LL LM LN LO LP LQ LR LS LT LU LV LW LX LY LZ MA MB MC MD ME MF MG MH MI MJ MK ML MN MO MP MQ MR MS MT MU MV MW MX MY MZ NA NB NC ND NE NF NG NH NI NJ NK NL NN NO NP NQ NR NS NT NU NV NW NX NY NZ OA OB OC OD OE OF OG OH OI OJ OK OL OM ON OO OP OQ OR OS OT OU OV OW OX OY OZ PA PB PC PD PE PF PG PH PI PJ PK PL PM PN PO PP PQ PR PS PT PU PV PW PX PY PZ QA QB QC QD QE QF QG QH QI QJ QK QL QM QN QO QP QQ QR QS QT QU QV QW QX QY QZ RA RB RC RD RE RF RG RH RI RJ RK RL RM RN RO RP RQ RR RS RT RU RV RW RX RY RZ SA SB SC SD SE SF SG SH SI SJ SK SL SM SN SO SP SQ SR SS ST SU SV SW SX SY SZ TA TB TC TD TE TF TG TH TI TJ TK TL TM TN TO TP TQ TR TS TT TU TV TW TX TY TZ UA UB UC UD UE UF UG UH UI UJ UK UL UM UN UO UP UQ UR US UT UU UV UW UX UY UZ VA VB VC VD VE VF VG VH VI VJ VK VL VM VN VO VP VQ VR VS VT VU VV VW VX VY VZ WA WB WC WD WE WF WG WH WI WJ WK WL WM WN WO WP WQ WR WS WT WU WV WW WX WY WZ XA XB XC XD XE XF XG XH XI XJ XK XL XM XN XO XP XQ XR XS XT XU XV XW XX XY XZ YA YB YC YD YE YF YG YH YI YJ YK YL YM YN YO YP YQ YR YS YT YU YV YW YX YY YZ ZA ZB ZC ZD ZE ZF ZG ZH ZI ZJ ZK ZL ZM ZN ZO ZP ZQ ZR ZS ZT ZU ZV ZW ZX ZY ZZ





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

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 AA AB AC AD AE AF AG AH AI AJ AK AL AM AN AO AP AQ AR AS AT AU AV AW AX AY AZ BA BB BC BD BE BF BG BH BI BJ BK BL BM BN BO BP BQ BR BS BT BU BV BW BX BY BZ CA CB CC CD CE CF CG CH CI CJ CK CL CM CN CO CP CQ CR CS CT CU CV CW CX CY CZ DA DB DC DD DE DF DG DH DI DJ DK DL DM DN DO DP DQ DR DS DT DU DV DW DX DY DZ EA EB EC ED EE EF EG EH EI EJ EK EL EM EN EO EP EQ ER ES ET EU EV EW EX EY EZ FA FB FC FD FE FF FG FH FI FJ FK FL FM FN FO FP FQ FR FS FT FU FV FW FX FY FZ GA GB GC GD GE GF GG GH GI GJ GK GL GM GN GO GP GQ GR GS GT GU GV GW GX GY GZ HA HB HC HD HE HF HG HH HI HJ HK HL HM HN HO HP HQ HR HS HT HU HV HW HX HY HZ IA IB IC ID IE IF IG IH II IJ IK IL IM IN IO IP IQ IR IS IT IU IV IW IX IY IZ JA JB JC JD JE JF JG JH JI JJ JK JL JM JN JO JP JQ JR JS JT JU JV JW JX JY JZ KA KB KC KD KE KF KG KH KI KJ KL KM KN KO KP KQ KR KS KT KU KV KW KX KY KZ LA LB LC LD LE LF LG LH LI LJ LK LL LM LN LO LP LQ LR LS LT LU LV LW LX LY LZ MA MB MC MD ME MF MG MH MI MJ MK ML MN MO MP MQ MR MS MT MU MV MW MX MY MZ NA NB NC ND NE NF NG NH NI NJ NK NL NO NP NQ NR NS NT NU NV NW NX NY NZ OA OB OC OD OE OF OG OH OI OJ OK OL OM ON OO OP OQ OR OS OT OU OV OW OX OY OZ PA PB PC PD PE PF PG PH PI PJ PK PL PM PN PO PP PQ PR PS PT PU PV PW PX PY PZ QA QB QC QD QE QF QG QH QI QJ QK QL QM QN QO QP QQ QR QS QT QU QV QW QX QY QZ RA RB RC RD RE RF RG RH RI RJ RK RL RM RN RO RP RQ RR RS RT RU RV RW RX RY RZ SA SB SC SD SE SF SG SH SI SJ SK SL SM SN SO SP SQ SR SS ST SU SV SW SX SY SZ TA TB TC TD TE TF TG TH TI TJ TK TL TM TN TO TP TQ TR TS TT TU TV TW TX TY TZ UA UB UC UD UE UF UG UH UI UJ UK UL UM UN UO UP UQ UR US UT UU UV UW UX UY UZ VA VB VC VD VE VF VG VH VI VJ VK VL VM VN VO VP VQ VR VS VT VU VW VX VY VZ WA WB WC WD WE WF WG WH WI WJ WK WL WM WN WO WP WQ WR WS WT WU WV WW WX WY WZ XA XB XC XD XE XF XG XH XI XJ XK XL XM XN XO XP XQ XR XS XT XU XV XW XX XY XZ YA YB YC YD YE YF YG YH YI YJ YK YL YM YN YO YP YQ YR YS YT YU YV YW YX YY YZ ZA ZB ZC ZD ZE ZF ZG ZH ZI ZJ ZK ZL ZM ZN ZO ZP ZQ ZR ZS ZT ZU ZV ZW ZX ZY ZZ

PROCESSES AND PROPERTIES AREA

ca

28

The composition of blossomed beets and the removal of their greens during the year 1936. Josef Vazler and Antonin Rádicka. Z. Zuckermund. Technol. Rep. 62. 129-332 (1937). -See C. A. 31, 6074. Frank Marchi

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

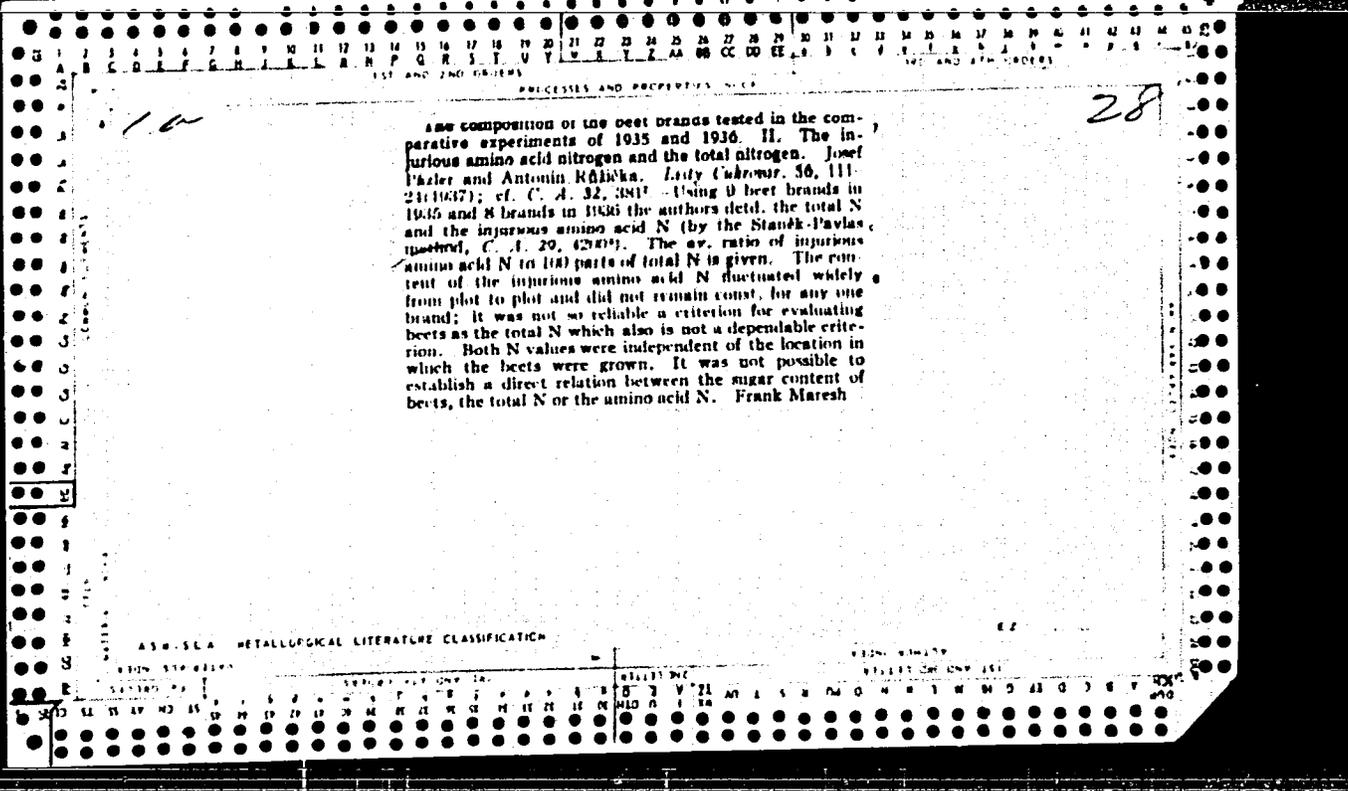
PROCESSES AND PROPERTIES INDEX

28

Reports on the comparative experiments with beet seeds conducted by the Central Czechoslovakian Society of the Sugar Industry in 1933. I. General experiments. Josef Pazler, Antonin Růžička, K. Patek, Jaroslav Dědek, Josef Vařátko and F. Dolák. *Listy Cukrovar. 52*, 181-97 (1934); *Z. Zucherind. Českoslovak Rep. 58*, 201-19 (1934).—The av. sugar contents of the various brands of beets on exptl. plots were: Wohanka 20.96%, Zapotil Z 20.44%, Selecta 20.32%, Dobrovice N 20.31%, Zapotil N 20.14% and Kleinwanzleben N 20.10% with a max. variation of 0.837. The yield of beet roots was: Dobrovice N 340.7 q. per ha., Kleinwanzleben 348.7, Zapotil Z 348.6, Zapotil N 346.7, Selecta 329.2 and Wohanka ZR 310.2. The yield of sugar in q. per ha. was: Dobrovice N 70.97, Kleinwanzleben N 69.89, Zapotil Z 68.93, Zapotil N 67.56, Selecta 66.06 and Wohanka ZR 64.79. A set of tables gives the results of analyses made for each brand and plot. All of the plots are described in detail as to the soil, fertilizer, care and weather. II. Secondary experiments. *Listy Cukrovar. 52*, 217-21; *Z. Zucherind. Českoslovak Rep. 58*, 229-34(1934).—In further expts., percentage contents of sugar and yields of beet roots in quintals per ha. were, resp., Dobrovice C 20.77, 358.6; Kleinwanzleben Z 20.61, 316.3; Dobrovice V 20.34, 372.4; and Kleinwanzleben B 19.74, 353.6. III. The quotient of purity of the digested beet juice. *Listy Cukrovar. 52*, 221-6(1934); *Z. Zucherind. Českoslovak Rep. 58*, 234-9 (1934).—In the primary expts. the quotients were: Dobrovice N 89.12, Zapotil Z 88.81, Selecta 88.78, Wohanka ZR 88.71, Zapotil N 88.68 and Kleinwanzleben N 88.38. In the secondary expts. the quotients became: Dobrovice V 89.33, Dobrovice C 89.12, Kleinwanzleben Z 88.54 and Kleinwanzleben B 88.01. The quotients likewise confirmed the observation that the variations are greater between the different plots than for the individual brands. Frank Maresh

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION





PROCESSES AND PROPERTIES INDEX

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*ch*

The composition of blossoming and fibrous beets. Josef Pázier, Antonín Bužicka and Karel Pátek. *Listy Cukrovar.* 52, 57-61(1933); *Z. Zuckerind. Technolovuk. Rep.* 58, 221-0(1934).--The hot and dry season of 1932 yielded a large number of fibrous beets in the Sedčice and Ratibof regions. Analyses of the roots showed an increase of, respectively, sugar 1-1.3%, total ash 12-22%, insol. ash 13-10% and pulp 5-10% when compared to normal beets from the same fields; the N constituents were equal. A large number of beets during the 1933 season went to seed in the Čakovice and Vlkava regions. Analyses of the beets after the shoots had formed but before blossoming revealed a lower sugar content, quotient of purity for liquors, insol. ash and albumin N; a higher total ash, insol. ash, amide N, and pulp, also a more variable content of total N and NH<sub>4</sub> than normal beets from the same fields. After the beets had blossomed and gone to seed the analyses revealed, respectively, higher sugar, invert sugar, total ash, sol. ash and pulp; a lower total N, albumin N, NH<sub>4</sub>, amide and detrimental N than normal beets from the same fields. The pulp of the fibrous beets showed an increase in ash and cellulose, but a decrease in the N content; these differences were accentuated with maturity. Pulp of fibrous beets from Slatinany, Daboplazy and Hornon (1933) was identical with pulp in mature seeded beets. The fibrosity of the root was related more to the chem. compn. of the pulp than to its quantity. Complete tables of results are given. Frank Mareš

METALLURGICAL LITERATURE CLASSIFICATION

21

CA

Refining of brown coal by heating with water vapor under pressure. Metallurg. O. Simck and Ajanko Rullha. *Mit. Kohlenforschungsinst. Prag. 1933, 355-420.* The physicochem. changes of brown coal resulting from drying and from heating with satd. water vapor under pressure are described. The most favorable conditions for the drying of the coal were considered, and a suitable process was described. A description is given of expts. in a 1-cu. m. lab. autoclave and in an industrial plant having a daily capacity of 400 tons of brown coal. The advantages in the use of a dried coal consist not only in a greater heat efficiency but also a saving in transportation. M. E. H.

AS 20.51.4 METALLURGICAL LITERATURE CLASSIFICATION

CZECHOSLOVAKIA

RUZICKA, P.

Research Monocrystal Institute (Vyzkumny ustav monokrystalu),  
Turnov

Prague, Casopis pro mineralogii a geologii, No 2, 1964, pp 233-  
239

"The Habit of Diamond Crystals."

RUZHEPOV, I.

Urgent needs of the wood chemicals industries. Prom.koop. 13  
no.12:9 D '59. (MIRA 13:4)

1.Fredsdatel' pravleniya oblpromsoвета, Blagoveshchensk.  
(Wood-using industries)

BOGOSLOVSKIY, Boris Ivanovich; ~~RUZHENTSEV, V. Ye.~~ red.; KORDE, K.B., red.  
izd-va; RYLINA, Yu.V., tekhn.red.

[Devonian Ammonoidea in the Rudnyy Altai] Devonskie ammonoidi  
Rudnogo Altaia. Moskva, Izd-vo Akad.nauk SSSR, 1958. 152 p.  
(Akademiia nauk SSSR. Paleontologicheskii institut. Trudy,  
vol.64) (MIRA 12:8)  
(Altai Mountains--Ammonoidea, Fossil)

RUZHEVSKIY, A. B., Doc Agric Sci (diss) -- "Improving the black-spotted cattle".  
Kiev, 1959. 44 pp (Min Agric Ukr SSR, Ukr Acad Agric Sci), 150 copies (KL, No  
25, 1959, 137)

RUZHICHKA, V.A.

Method of investigating the magnetic fields of differential  
current transformers with a toroidal ferromagnetic core.

Trudy Inst.vod.khoz.i energ. AN Kir.SSR no.5:139-147 '59.

(MIRA 13:5)

(Electric transformers)

RUZHICHEKA, V.A.

Dynamic characteristics of large hydraulic installations in  
connection with automatic control. Izv.AN Kir.SSR no.6:39-56  
'58. (MIRA 11:12)

(Hydraulic engineering) (Automatic control)

RUZHINSKIY, T.

Golden stars. Sov.profsoiuzy 7 no.21:17-20 N '59.  
(MIRA 12:12)

1. Ruzhinskiy, t.  
(Gitalov, Aleksandr Vasil'evich)  
(Kirovograd Province--Tractors)

RUZHITSKIY, B.M.

Investigating the strength of fixed joints with guaranteed  
tightness under the effect of static torsion. Vop.por.met.  
i prochn.mat. no.5:160-166 '58. (MIRA 12:8)  
(Powder metal processes)

RUZHITSKIY, B. M.

18(0.7)

FRASE I BOOK EXPLOITATION

SOV/2170

Andaliya nauk Ukrainyoy SSR. Institut metallorermid i spetsial'nykh splavov

Voprasy poroshkovoy metallurgii i prochnosti materialov, ypp. 5 (Problems in Powder Metallurgy and Strength of Materials, N° 5) Kiev, Izd-vo AN USSR, 1958. 172p. 2,000 copies printed.

Ed. of Publishing House: Ya. A. Samohvalov; Tech. Ed.: V. Ye. Podorozhko; Editorial Board: I. N. Prantsyevich (Resp. Ed.), I. M. Podorozhko, G. S. Pisarenko, G. V. Sazonov, and V. V. Grigor'yeva.

FORMER: This collection of articles is intended for a wide circle of scientists and engineers in the research and production of powder metallurgy. It may also be useful to advanced students of metallurgical institutes.

COVERAGE: This collection of articles describes the results of investigations made at the Institut metallokeramiki i spetsial'nykh splavov, AN USSR (Institute of Powder Metallurgy and Special Alloys, Academy of Sciences, Ukrainian SSR). The physical and chemical properties of materials used in powder metallurgy are discussed. Materials described as new production processes, and methods and results of mechanical testing are described. No personalities are mentioned. References follow each article.

TABLE OF CONTENTS:

Pisarenko, G.S., and V.A. Chebotarev. Device for Testing Heat-Resistant Materials for Long Time Strength and Creep During Tension and Bending. The authors describe construction of the new ID-3 device and its advantages over other existing devices. 121

Arcevy, V.A., E.S. Umanets, and A.L. Kvitka. Certain Problems in the Theory of Elasticity. The authors discuss the functions of stresses, equations of compatibility of deformations, solutions in the case of the functions of displacements and stresses, and the utilization of electrical analogue simulation. 134

Ruzhitskiy, B.M. Investigating the Strength of Interference-Fit Permanent Joints Under Static Torsion. The author describes the methods and results of his experimental investigations of the strength of press- and shrink-fit joints of samples made of a typical construction carbon-steel previously normalized at 850°C. 160

Sholepovskina, N.I. Strength of Acetate Motion Picture Film at Normal and Elevated Temperatures. The author presents the results of an experimental determination of the proportional limit, yield point, ultimate strength, relative elongation at static fracture, shear strength, and resistance to impact of motion picture film. 167

AVAILABLE: Library of Congress

Card 6/6

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9-1-59

7

MALKIN, I.P.; VOLKOVA, L.A.; RUZHITSKIY, V.I.

Smelting stainless and heat-resistant steels at the Ural Machinery  
Plant. Sbor.st.UZTM no.3:52-61 ' 58. (MIRA 11:12)

(Sverdlovsk--Steel, Structural--Electrometallurgy)

(Steel, Stainless--Electrometallurgy)

(Heat-resistant alloys--Electrometallurgy)

SOV/137-59-5-9923

Translation from: Referativnyy zhurnal, Metallurgiya, 1959, Nr 5, p 67 (USSR)

AUTHORS: Malkin, I.P., Volkova, L.A., Ruzhitskiy, V.I.

TITLE: Smelting Stainless and Heat Resistant Steels at the Uralmash-zavod

PERIODICAL: Sb. statey. Ural'skiy z-d tyazh. mashinostr. im. S. Ordzhonikidze, 1958, Nr 3, pp 52 - 61

ABSTRACT: Information is given on the experience made in the production of stainless and heat resistant steels at the Uralmashzavod. In the production of certain steel grades the following methods were used: vacuum treatment of the metal in the ladle or de-gassing of the metal flow in a vacuum during the transfer from one ladle into another, and teeming in a neutral gas medium. In casting ingots for forgings, molds having a triple conicity of the side walls (5.1; 15.9 and 94% from top to bottom) and a spherical bottom were employed. Ingots, cast in such molds proved to be more compact and homogeneous.

Card 1/1

V.B.

RUZHITSKIY, V.O.

Diamond prospects and kumberlites of the Kola Peninsula. Izv.  
Kar.i Kol'.fil.AN SSSR no.4:20-23 '59. (MIRA 13:5)

1. Sovet po koordinatsii AN SSSR.  
(Kola Peninsula--Kimberlite)

RUZHITSKIY, V.O.

Discoveries of diamonds on the Russian platform and prospects  
for the future. Izv. Kar. i Kol'. fil. AN SSSR no.1:3-13 '59.  
(MIRA 12:9)

1. Sovet po koordinatsii AN SSSR.  
(Russian platform--Diamonds)

RUZHITSKIY, Yevgeniy Ivanovich; MIL', M.L., doktor tekhn.nauk, retsenzent;  
BRATUKHIN, I.P., prof., red.; TUBYANSKAYA, F.G., izdat.red.;  
ORESHKINA, V.I., tekhn.red.

[Aviation without airports] Bezaerodromnaya aviatsiya. Moskva,  
Gos.izd-vo obor.promyshl., 1959. 169 p. (MIRA 12:12)  
(Helicopters) (Vertically rising airplanes)

1(10)

PHASE I BOOK EXPLOITATION

SOV/3422

Ruzhitskiy, Yevgeniy Ivanovich

Bezaerodromnaya aviatsiya (Vertical and Short Take-Off Aircraft) Moscow, Oborongiz, 1959. 172 p. Errata slip inserted. 10,000 copies printed.

Reviewer: M.L. Mil', Doctor of Technical Sciences; Ed.: I.P. Bratukhin, Professor; Managing Ed.: A.I. Sokolov, Engineer; Ed. of Publishing House: F.G. Tubyanskaya; Tech. Ed.: V.I. Oreshkina.

PURPOSE: This book is intended for readers already acquainted with the fundamentals of aeronautics. It may also be used by students of aeronautical schools of higher education and tekhnikums, by engineers and technicians in the aviation industry, and by the flying, engineering, and technical personnel of the Air Force and of the civil air fleet.

COVERAGE: The book describes various forms of helicopters, convertiplanes, and high-speed airplanes capable of vertical take-off. It considers special features of their design, problems arising in production, and the future prospects of aircraft not requiring regular airports. The work done to shorten the take-off and landing distances of ordinary airplanes is described. The book is illustrated

Card 1/3

Vertical and Short (Cont.)

SOV/3422

Special features of the aerodynamics of a helicopter rotor in horizontal flight	90
Methods of increasing the maximum speed of helicopters	96
Combined helicopters	104
Convertiplanes	112
Vertical take-off and landing of aircraft	119
Propeller-driven aircraft for vertical take-off	128
Jet aircraft for vertical take-off	143
Comparison of helicopters and vertical take-off aircraft	167
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AVAILABLE: Library of Congress

Card 3/3

AC/mfd  
4-26-60

ONDRACHEK, Ya.; KRAL', L.; BENDA, R.; BESHETS, M.; RUZHKOVA, L.

Outbreaks of aseptic forms of meningitis induced by ECHO virus  
(type 9) in child centers. Sov.med. 23 no.12:81-86 D '59.

(MIRA 13:4)

1. Iz kafedry infektsionnykh bolezney (rukovoditel' - dotsent Ya.  
Ondrachek) i iz kafedry epidemiologii (rukovoditel' - dotsent K.  
Makovichka) meditsinskogo fakul'teta Karlova universiteta, Gradets-  
Kralove, Chekhoslovakiya.

(MENINGITIS virol.)

(VIRUS DISEASES in inf. & child.)

RUZHO, Zh. [Roujeau, J.]; SOR, Sh. [Sors, Ch.]

Anatomical clinical study of the effect of radiotherapy on the parenchyma of the lungs. Arkh.pat. 21 no.6:44-51 '59. (MIRA 12:12)

1. Iz kafedry patalogicheskoy anatomii (zav. - prof. Delaryu) Parizhskogo meditsinskogo fakul'teta.

(ROENTGEN RAYS, inj. eff.

pulm. parenchyma, histopathol. (Rus))

(LUNGS, eff. of radiations on

x-rays, on parenchyma, histopathol. (Rus))

YUGOSLAVIA

A. KRPO and A. RUZIC, Surgical Department (Hirurgsko odeljenje) Chief (SeF) Prof Dr I. POPOVIC-DJANI; and Pathophysiology Section (Patofiziološki osek) of Hospital (Bolnica) 'D. Brankov Novak', Belgrade.

"Hypoadrenal Reaction to Surgical Trauma."

Belgrade, *Acta Chirurgica Yugoslavica*, Vol. 9(10), No 3-4, 1982; pp 236-244.

Abstract [English summary modified]: In a woman aged 43, ileus due to strangulation occlusion and shock correctly diagnosed as acute adrenal cortical insufficiency ascribed to previous adrenocortical treatment and hysterectomy-adenectomy; surgery with close postoperative surveillance and appropriate hormonal treatment resulted in relatively uneventful recovery. Discussion. Table, 2 clinical charts, 3 US references.

1/1

RUFIC, S.

Fractional constituents of gasoline. p. 769.

VOJNO-TEHNIČKI GLASNIK. Beograd, Yugoslavia. Vol. 3, no. 10, Oct. 1955.

Monthly List of East European Accessions (EEAI) LG, Vol. 8, no. 9, Sept. 1959.

Uncl.

RUZA, Lukacic-Ocak, d-r; RUZICA, Ilic, d-r

Progressive vision loss in glaucoma simplex chronicum after  
fistulation operation and induction of intraocular hypotension.  
Med. arh., Sarajevo 13 no.5:27-30 S-0 '59.

1. Ocna klinika Medicinskog fakulteta u Beogradu, upravnik: prof.  
d-r Vladimir Cavka.  
(GLAUCOMA surg.)

RUZICA, M.; KOZIEL, M.

Cushing's syndrome on the basis of hyperplasia of the adrenal cortex in an 8-year-old patient. *Cesk. pediat.* 20 no.9:800-804 S '65.

1. Detske oddeleni (vedouci MUDr. M. Zak) a chirurgicke oddeleni Krajske nemocnice s poliklinikou v Ostrave (vedouci doc. dr. K. Tyrovsky, CSc.).

STOSIC, Darko, dr (Simina 22a, Beograd); RUZICIC, Nikola, dr, redovni profesor; MILOSEVIC, Perisa, dr, docent; PANIC, Bozidar, inz., asistent; MARTINOVIC, Borka, asistent

Study of the degree of homogenization in the mixtures of livestock fodder by applying radioactive isotopes. Technical and economical aspects. Tehnika Jug 17 no.6:Suppl.: Radioizotopi zrac 1 no.6:1050-1056a Je '62.

1. Savetnik Savezne komisije za nuklearnu energiju, Beograd.
2. Poljoprivredni fakultet Univerziteta u Beogradu (for Ruzicic, Milosevic Panic).
3. Institut za primenu nuklearne energije u poljoprivredi, veterinarstvu i sumarstvu, Zemun (for Martinovic).

RUZICIC, Uros, prof., dr.; RUZICIC, Radmila

Animal protein nutrition and the incidence of infectious diseases in pregnancy and birth weight of premature infants. Med. glas. 16 no.9:387-389 S '62.

1. Stacionar za prevremeno rodeni decu (Upravnik: dr. M. Subic)  
Decja klinika Medicinskog fakulteta u Beogradu (Upravnik:  
prof. dr. B. Tasovac).  
(PROTEINS) (MEAT) (PREGNANCY COMPLICATIONS)  
(INFANT PREMATURE) (BIRTH WEIGHT) (DIET)

RUZICIC, U.; RUZICIC, Radmila

Premature births and nutrition of pregnant women. Glas. Srpske  
akad. nauka, odelj. med. 248 no.16:127-132 '61.

(INFANT PREMATURE) (PREGNANCY) (DIET)

YUGOSLAVIA

Prof. Dr. Uros Ruzicic and Dr. Radmila Ruzicic, Prematures' Nursery (Stacionar za prevremeno rođenje decu) Head (Upravnik) Dr. M. Subic; and Pediatric Clinic Medical Faculty (Decja klinika Medicinskog fakulteta) Head Prof. Dr. B. Tasovac, University of Belgrade.

"Dietary Animal Proteins, Morbidity During Pregnancy and Weight of Premature Neonates."

Belgrade, Medicinski Glasnik, Vol 16, No 9, Sept 1962; pp 387-391.

Abstract [English summary modified]: Dietary habits of mothers of 720 premature infants were analyzed and correlated with maternal diseases during pregnancy (excluding gynecologic and hormonal) and birth weight and fate of their children. There was clear correlation indicating that inadequate nutrition, especially low ratio of animal proteins, is accompanied by greater incidence and severity of infectious diseases during pregnancy, lower birth weight. Seven diagrams, 1 Yugoslav and 8 Western references.

1/1

16

RUZICIC, Uros, prof., dr.; RUZICIC, Radmila

Animal protein nutrition and the incidence of infectious diseases in pregnancy and birth weight of premature infants.

APPROVED FOR RELEASE: 06/20/2000. CIA-RDP86-00513R001446220001-1"

1. Stacionar za prevremeno rođenje decu (Upravnik: dr. M. Subic)  
Decja klinika Medicinskog fakulteta u Beogradu (Upravnik:  
prof. dr. B. Tasovac).

(PROTEINS) (MEAT) (PREGNANCY COMPLICATIONS)  
(INFANT PREMATURE) (BIRTH WEIGHT) (DIET)

5

RUZICIC, U., prof. dr.; PAVICEVIC, R., dr.; SIMOVIC, R., dr.

Sulkovicev's test and vitamin D dosage. Med. glas. 17 no.10:  
411-413 0 '63.

(VITAMIN D) (DOSAGE FORMS)

S

RUZICIC, U.; RUZICIC, Radmila

Premature births and nutrition of pregnant women. Glas. Srpske  
akad. nauka, odelj. med. 248 no.16:127-132 '61.

(INFANT PREMATURE) (PREGNANCY) (DIET)

RUZICIC, U.; PAVLETIC, Ruzica; ACIMIC, D.

Cutaneous temperature of the breast as the index of its secretory activity. Glas. srpske akad. nauk. [Med] no.15:95-100 '60.

(BODY TEMPERATURE) (LACTATION physiol)

YUGOSLAVIA

Prof. Dr. Uros RUZICIC and Dr. Radmila RUZICIC, Prematures' Nursery (Stacionar za prevremeno rođenu decu) Head (Upravnik) Dr. M. SUBIC; and Pediatric Clinic Medical Faculty (Decja klinika Medicinskog Fakulteta) Head Prof. Dr. B. TASOVAG, University of Belgrade.

"Dietary Animal Proteins, Morbidity During Pregnancy and Weight of Premature Neonates."

Belgrade, Medicinski Glasnik, Vol 16, No 9, Sept 1962; pp 387-391.

Abstract [English summary modified]: Dietary habits of mothers of 720 premature infants were analyzed and correlated with maternal diseases during pregnancy (excluding gynecologic and hormonal) and birth weight and fate of their children. There was clear correlation indicating that inadequate nutrition, especially low ratio of animal proteins, is accompanied by greater incidence and severity of infectious diseases during pregnancy, lower birth weight. Seven diagrams, 1 Yugoslav and 6 Western references.

1/1

RUZICIC, Uros, prof. dr.; BRAJEVIC, Cetko, dr.; SUBIC, Misa, dr.; SOKOLOVIC,  
Slobodan, dr.

Psychological factors and milk production in breast feeding. Med.  
glasn. 14 no.10:480-481 0 '60.

1. Stacionar za prevremeno rodenu decu u Beogradu (Upravnik: dr  
M. Subic).

(BREAST FEEDING psychol)

RUZIC-PETROV. A.

Yugoslavia (430)

Science

A contribution to the knowledge on the ecology of *Citellus Citellus* L.  
p. 97. ZBORNIK RADOVA, Vol. 2, no. 1, 1950.

East European Accessions List. Library of Congress, Vol. 1, no. 14, Dec. 1952.  
UNCLASSIFIED.

RUZICKA,

RUMANIA / Chemical Technology. Processing of Natural H  
Gases and Petroleum. Motor and Rocket Fuel.  
Lubrications.

Abs Jour: Ref Zhur-Khimiya, No 22, 1958, 75220.

Author : Fuzika.

Inst : Not given.

Title : The Perspectives of the Development in the Chem-  
ical Processing of Petroleum in Connection With  
the Application of "Molecular Sieves".

Orig Pub: Techn. nova, 1958, 5, No 146, 1.

Abstract: The author points out a new method for separat-  
ing hydrocarbon mixtures by means of the so-called  
"Molecular Sieves" which are synthetic zeolites  
of the Mg-Ca alumosilicate types. The great im-  
portance of this progressive method and the nec-  
essity for its application to the petroleum in-  
dustry of PPR is emphasized.

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42

CZECHOSLOVAKI./Optics - Optical Methods of Analysis

K

Abs Jour : Ref Zhur Fizika, No 3, 1959, 19201

Author : Ruzicka, Ant

Inst : -

Title : Manual Refractometer

Orig Pub : Jerna mech. a opt., 1958, 3, No 8, 266-270, 289

Abstract : Brief description of various models of manual refractometers, produced at the present time by Germany, British, American, French, Hungarian, and Czech optical plants. The most highly perfected and most original are the following models: Zeiss-Oberkochen (with very large range of scales, from 0 to 85° dey substances), the French firm SOM (with spherical prism surfaces), Bausch and Lomb (with thermometers that give directly the values of the temperature corrections, and two refractometers of the OPL firm (Paris): with binetal thermometers and a differential one of increased accuracy. The author also

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- 153 -

CZECHOSLOVAKIA/Optics - Optical Methods of Analysis

K

Abstr Jour : Ref Zhur Fizika, No 3, 1959, 19201

reports that the Czechoslovak Institute of Optics and Precision Mechanics has prepared a new model of manual refractometer with automatic temperature correction, which requires no thermostatic control or temperature measurement, which insures an accuracy of  $\pm 0.2\%$  dry substances within the range from  $10^{\circ}$  to  $30^{\circ}$ . -- B.V. Ioffe

Card 2/2

CZECHOSLOVAKIA / Chemical Technology. Chemical Products and Their Applications. Carbohydrates and Their Processing. H

Abs Jour: Ref Zhur-Khimiya, 1959, No 4, 134C3.

Author : Ruzicka, Ant.

Inst : Not given.

Title : Removal of Salt Deposits from the Prism of a Production Refractometer.

Orig Pub: Jemna mech. a opt., 1958, 3, No 4, 109-111.

Abstract: The use of a production refractometer for inspecting syrup density in the last evaporation frame is hindered by the deposit on the measuring prism of the refractometer of a layer of inorganic compounds which dissolves well in hydrochloric acid. A simple device is recommended for periodically cleaning the surface of the prism. Through the

Card 1/2

SKALICKY, J.; SAPAK, K.; RUZICKA, A.

Effect of placental gonadotropic hormones on the genitalia of female adrenalectomized rats. Cesk. gyn. 28 no.1/2:138-141 F '63.

1. Katedra starostlivosti o matku Lek. fak. UK v Bratislave, veduci prof. dr. Sv. Stefanik.

(GONADOTROPINS CHORIONIC) (GENITALIA FEMALE)  
(ADRENALECTOMY)

L 43590-65 EWT(1)/EWT(m)/T/EEC(b)-2/EWP(t)/EWP(b)/EWA(h)/EWA(c) Pz-6/Pi-4/  
 Feb IJP(c) JD/GC/AT  
 ACCESSION NR: AT5009574 Z/0000/62/000/000/0068/0073 51  
 47

AUTHOR: Dragoun, Z., Cupal, V., Ruzicka, A. (Tsupal, V., Ruzhichka, A.) B+1

TITLE: New departures in etching Ge and Si single crystals in an ultrasonic crystal 27 27 16

SOURCE: Konferenc. o monokrystalech. 4th, Turnov, 1961. Sbornik referatov. Turnov, VUM, 1962, 63-73

TOPIC TAGS: semiconductor crystal, germanium single crystal, silicon single crystal, crystal growth, crystal etching, ultrasonic etching, crystal dislocation 21

ABSTRACT: Previous micro-roentgenographic and optical methods of determining the physical properties of semiconductor germanium and silicon single crystals, such as their electrical conductivity, carrier lifetime and mobility, have failed to give a complete picture of their structure or the relation between stresses and dislocation density. The usual metallographic methods do not solve complex problems such as the relation between etching holes and the distinguishing capacity of single crystals. The authors therefore developed a method of applying an ultrasonic field during etching by means of a complicated apparatus consisting of a polyvinyl vessel containing a primary source of ultrasonic radiation, and perfectly round Ge and Si

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ACCESSION NR: AT5009574

2

crystals in an etching fluid separated into compartments by metal and semiconductor membranes. The interference of direct and reflected vibrations forms successive and stationary waves in the fluid, and the ultrasonic field causes cavitation which is much more pronounced and rapid than in ordinary etching. The preparation of perfectly round Ge and Si plates by ultrasonic methods and colloidal techniques for cleaning their surfaces are described. A series of formulas is given expressing the vibration frequency and wavelength to be employed in the etching fluid, and a table shows the frequencies produced in oriented single-crystal plates. The very marked difference between reliefs etched by D-1 fluid with and without an ultrasonic field is illustrated in photographs and described in detail. The authors predict that their new method will have great practical value in determining macroscopic stress in Ge single crystals (which has not so far been possible), in providing much better microscopic etching, and providing rapid means of distinguishing dislocation types and of exposing class II structures. It will also aid in detecting residual macroscopic stress, which is most important with Ge and Si single crystals. "The authors express their gratitude to Dr. A. Mikulaschek of VUST in Prague for valuable advice." (orig. art. has: 14 figures, 2 tables and 17 formulas.

Card 2/3

L 43590-65			
ACCESSION NR: AT5009574			2
ASSOCIATION: <u>Vojenska Akademie Antonina Zapotocksho (Antonin Zapotocky Military Academy);</u> <u>Universita J. E. Purkyne, Brno (J. E. Purkyns University)</u>			
SUBMITTED: 00	ENCL: 00	SUB CODE: IC, EC	
NO REF SOV: 000	OTHER: 011		
BGS Card 3/3			

SRAMEK, Milanek, inz.; RUMICKA, Antonin

A welding jig for making welded reinforcement baskets from prefabricated bar elements. Inz stavby 12 no.11. Suppl: Mechanizace no.11:181-183 '64.

1. Konstruktiva National Enterprise, Prague.

HAJKR. O.: REZICKA, B.

Study of the outlines of collection shells by biometric methods.  
Sbor VNF Csteava 10 no 1/2:133-139 '64.

1. Submitted December 20, 1963.

RUZICKA, B.

"Boucekia nov. gen., a new Ordovician pelecypod from Bohemia."

SBORNIK, ODDIL PALEONTOLOGICY, Praha, Czechoslovakia, Ustredni ustav geologicky.  
Vol. 22, 1955.

Monthly List of East European Accessions (EEAI), Lc, Vol. 8, No. 8, August 1959.

PRIBYL, A.; RUZICKA, E.; VASICEK, M.

"Nonevident disconformities and carboniferous weathering in the Poruba and Sedlo zone of the Ostrava-Karvina Coal basin."

p. 5 (Prace) No. 7, 1956  
Prague, Czechoslovakia

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

L 45339-66 FSS-2/T WJ/JW/JWD/RB

ACC NR: AP6022857 SOURCE CODE: CZ/0086/66/000/008/0303/0305

AUTHOR: Ruzicka, Bedrich (Engineer; Candidate of sciences); Kusak, Jan  
(Engineer)

38  
32  
B

ORG: none

TITLE: Recovery system in sounding rockets

SOURCE: Letectvi-kosmonautika, no. 8, 1966, 303-305

TOPIC TAGS: sounding rocket, geophysic research, deceleration parachute,  
recovery device

ABSTRACT: The inclusion of recovery devices in the equipment systems of sounding rockets is discussed. The design costs and weight of these devices are assessed since an increase in weight affects the rocket ceiling. However, advantages such as extended trajectory of the rocket in the upper layers of the atmosphere, increased safety for the population in the areas of rocket recovery and impact and instruments, photos, records, and, eventually, of samples of the

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L 45339-66

ACC NR: AP6022857

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atmosphere collected by rockets are considered to be of prevalent interest. The possibility of reusing the instrument module of a rocket with its costly instruments, as well as the rocket itself is stressed as a significant economy factor. The following recovery devices are described as being used in Soviet sounding rockets:

- (1) Recovery parachute systems in MR-1 sounding rockets, which consist of the instrument-module parachute, and a rocket parachute. The former opens at an altitude of approximately 70 km, before the rocket reaches the apex of its trajectory, thus stabilizing the instrument module in the final phase of the ascent.
- (2) Deceleration surfaces in "A"-series geophysical reserach rockets. The surfaces are hydraulically controlled by a servomechanism. A picture of a Soviet geophysical rocket with deceleration surfaces and two photos depicting the parachute systems in an MR-1 sounding rocket are presented by the authors. A diagram showing the drift values for various trajectories of rockets decending from different altitudes is given. The article also mentions several Western sounding rockets and gives an evaluation of their recovery capabilities and equipment. Listed are the ASP rockets, the Aerobee rockets in which the aerodynamic destabilization is used for decleration, the French "Veronique" rocket in which an

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L 45339-66

ACC NR: AP6022857

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aerodynamically unstable design is combined with a deceleration parachute, the Reingold Tilling folded-wings rocket, the Arcas and Loki rockets, and the new West German "Dornier" sounding rocket equipped with a homing-recovery system which enables the rocket to return to the launching site after completing its mission. The article concludes that Czechoslovakia is rather limited in the use of sounding rockets of both the parachute-recovery type as well as the high-acceleration type. The alternatives are seen to lie in liquid-propellant sounding rockets equipped with a deceleration and homing system of the "Dornier" type, or in solid-propellant "Consumable" rockets. A drawing of the "Dornier" rocket, and a diagram showing the rocket's guided-descent trajectory are given. Another figure shows the economic advantages of liquid-propellant rockets equipped with homing recovery systems over the similarly equipped solid-propellant rockets. Orig. art. has: 5 figures, and 4 diagrams. [KP]

SUB CODE: 22/ SUBM DATE: none/

Card

3/3 LC

RUZICKA, B.; VASICEK, M.

Fossil thecamoebina in the coal-bearing sediments in the basin of Upper Silesia. p. 49. (CASOPIS; ODDIL PRIRODOVEDNY, Vol. 126, No. 1, 1957. Praha, Czechoslovakia)

GC: Monthly List of East European Accessions (MEAL) LC, Vol. 6, No. 12, Dec 1957. Uncl.

POLAND

RUZICKA, Barbara, mgr.

Research Department, Chemical Works (Zakład Naukowo-Badawczy, Zakłady Chemiczne), Oswiecim.

Warsaw, Chemia analityczna, No 6, November-December 1965, pp 1165-1169.

"Separation and quantitative determination by paper chromatography of C<sub>1</sub> - C<sub>5</sub> alcohols in water from the Fischer Tropsch synthesis."

SINGER, Evzen; RUZICKA, Bohuslav; TURTENWALD, Josef

Construction of an objective fluorometer for measurement of  
melt fluorescence, and equipment for determination of traces  
of uranium. Chem listy 58 no. 2:224-230 F '64.

1. Vyzkumny ustav anorganicke chemie, Usti nad Labem.

KUZICKA, C. A.

27

Measurements with an objective photocolormeter. K. SANDORA AND C. A. KUZICKA. *Lesty Cukrov. 46, 629-34 (1930)*.— In order to make the conditions of reproduction more accurate, the photometer was equipped with a special aperture. The 0.01 N I standard was replaced by a  $K_2Cr_2O_7$  and  $CoSO_4$  mixt. which is very stable and tones well with the solns. The final shades were achieved with  $CuSO_4$ . The standards used are: (1) 10° St: 0.7190 g.  $CuSO_4$ , 1.0843 g.  $CoSO_4$ , and 0.0433 g.  $K_2Cr_2O_7$  per 100 cc.  $H_2O$ . (2) 2.5° St: 0.1740 g.  $CuSO_4$ , 0.2631 g.  $CoSO_4$ , and 0.0106 g.  $K_2Cr_2O_7$  per 100 cc.  $H_2O$ . (3) 0.5° St: 0.0197 g.  $CuSO_4$ , 0.0440 g.  $CoSO_4$ , and 0.0018 g.  $K_2Cr_2O_7$  per 100 cc.  $H_2O$ . Light has no effect upon the color of the solns.; solns kept in sunlight (6) days were identical in color with those kept in the dark throughout the same period.

FRANK MARSH

AND 31.0 METALLURGICAL LITERATURE CLASSIFICATION

U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR	AS	AT	AU	AV	AW	AX	AY	AZ	BA	BB	BC	BD	BE	BF	BG	BH	BI	BJ	BK	BL	BM	BN	BO	BP	BQ	BR	BS	BT	BU	BV	BW	BX	BY	BZ	CA	CB	CC	CD	CE	CF	CG	CH	CI	CJ	CK	CL	CM	CN	CO	CP	CQ	CR	CS	CT	CU	CV	CW	CX	CY	CZ	DA	DB	DC	DD	DE	DF	DG	DH	DI	DJ	DK	DL	DM	DN	DO	DP	DQ	DR	DS	DT	DU	DV	DW	DX	DY	DZ	EA	EB	EC	ED	EE	EF	EG	EH	EI	EJ	EK	EL	EM	EN	EO	EP	EQ	ER	ES	ET	EU	EV	EW	EX	EY	EZ	FA	FB	FC	FD	FE	FF	FG	FH	FI	FJ	FK	FL	FM	FN	FO	FP	FQ	FR	FS	FT	FU	FV	FW	FX	FY	FZ	GA	GB	GC	GD	GE	GF	GG	GH	GI	GJ	GK	GL	GM	GN	GO	GP	GQ	GR	GS	GT	GU	GV	GW	GX	GY	GZ	HA	HB	HC	HD	HE	HF	HG	HH	HI	HJ	HK	HL	HM	HN	HO	HP	HQ	HR	HS	HT	HU	HV	HW	HX	HY	HZ	IA	IB	IC	ID	IE	IF	IG	IH	II	IJ	IK	IL	IM	IN	IO	IP	IQ	IR	IS	IT	IU	IV	IW	IX	IY	IZ	JA	JB	JC	JD	JE	JF	JG	JH	JI	JJ	JK	JL	JM	JN	JO	JP	JQ	JR	JS	JT	JU	JV	JW	JX	JY	JZ	KA	KB	KC	KD	KE	KF	KG	KH	KI	KJ	KL	KM	KN	KO	KP	KQ	KR	KS	KT	KU	KV	KW	KX	KY	KZ	LA	LB	LC	LD	LE	LF	LG	LH	LI	LJ	LK	LL	LM	LN	LO	LP	LQ	LR	LS	LT	LU	LV	LW	LX	LY	LZ	MA	MB	MC	MD	ME	MF	MG	MH	MI	MJ	MK	ML	MM	MN	MO	MP	MQ	MR	MS	MT	MU	MV	MW	MX	MY	MZ	NA	NB	NC	ND	NE	NF	NG	NH	NI	NJ	NK	NL	NM	NN	NO	NP	NQ	NR	NS	NT	NU	NV	NW	NX	NY	NZ	OA	OB	OC	OD	OE	OF	OG	OH	OI	OJ	OK	OL	OM	ON	OO	OP	OQ	OR	OS	OT	OU	OV	OW	OX	OY	OZ	PA	PB	PC	PD	PE	PF	PG	PH	PI	PJ	PK	PL	PM	PN	PO	PP	PQ	PR	PS	PT	PU	PV	PW	PX	PY	PZ	QA	QB	QC	QD	QE	QF	QG	QH	QI	QJ	QK	QL	QM	QN	QO	QP	QQ	QR	QS	QT	QU	QV	QW	QX	QY	QZ	RA	RB	RC	RD	RE	RF	RG	RH	RI	RJ	RK	RL	RM	RN	RO	RP	RQ	RR	RS	RT	RU	RV	RW	RX	RY	RZ	SA	SB	SC	SD	SE	SF	SG	SH	SI	SJ	SK	SL	SM	SN	SO	SP	SQ	SR	SS	ST	SU	SV	SW	SX	SY	SZ	TA	TB	TC	TD	TE	TF	TG	TH	TI	TJ	TK	TL	TM	TN	TO	TP	TQ	TR	TS	TT	TU	TV	TW	TX	TY	TZ	UA	UB	UC	UD	UE	UF	UG	UH	UI	UJ	UK	UL	UM	UN	UO	UP	UQ	UR	US	UT	UU	UV	UW	UX	UY	UZ	VA	VB	VC	VD	VE	VF	VG	VH	VI	VJ	VK	VL	VM	VN	VO	VP	VQ	VR	VS	VT	VU	VV	VW	VX	VY	VZ	WA	WB	WC	WD	WE	WF	WG	WH	WI	WJ	WK	WL	WM	WN	WO	WP	WQ	WR	WS	WT	WU	WV	WW	WX	WY	WZ	XA	XB	XC	XD	XE	XF	XG	XH	XI	XJ	XK	XL	XM	XN	XO	XP	XQ	XR	XS	XT	XU	XV	XW	XX	XY	XZ	YA	YB	YC	YD	YE	YF	YG	YH	YI	YJ	YK	YL	YM	YN	YO	YP	YQ	YR	YS	YT	YU	YV	YW	YX	YZ	ZA	ZB	ZC	ZD	ZE	ZF	ZG	ZH	ZI	ZJ	ZK	ZL	ZM	ZN	ZO	ZP	ZQ	ZR	ZS	ZT	ZU	ZV	ZW	ZX	ZY	ZZ
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Changes in dried sweet cassettes during storage. K SANDERA AND C A RUSICKA  
*Lity Chyba*, 49, 103 (1949). Sweet beet cassettes were dried in Eynshan under  
various conditions. Fluctuations in the range 10-30° caused no change in an 18-  
month period other than decreasing the reducing substances. Variations in temp  
or light had no influence. The atm humidity had a great effect; in one expt the whole  
stock was disintegrated by high humidity. With ventilation, the cassettes retained a  
faultless appearance and in an 18 month period showed a decrease in the reducing sub-  
stances when compared with nonventilated stock. To study this decrease, the ven-  
tilation rates were changed at various temps. the entrance of air decreased the con-  
tent of reducing substances (9% during the first 6 hrs.) The ventilation expt ex-  
plains the drop observed in the temp fluctuation expt and the experience with drying  
bins working with large excess of air. FRANK MARSH

ALU 114 DETAILORIAL LITERATURE CLASSIFICATION

PROCESSES AND PROPERTIES INDEX

28

The conductometric determination of the affinity of raw sugars. K. SANDRA  
 and G. A. RULICKA. *Listy Cukrovar*, 49, 355-61 (1931).—The affinity of 120 samples of  
 raw sugars from the 1929-30 season was detd. (1) polarimetrically and by the elec.  
 cond. method and (2) colorimetrically according to the Berlin method. In method (1)

10 g. of raw sugar is placed so that 100 cc. H<sub>2</sub>O at 20° passes over the mass in 1 min.  
 The soln. is made up to 100 cc. vol. The remaining undissolved sugar is dissolved in  
 H<sub>2</sub>O and made up to 100 cc. vol. Both solns. are analyzed for sugar in a polarimeter  
 and for molasses ash by the elec. cond. method. Method (2) allows the sugar to stand  
 in contact with a small quantity of H<sub>2</sub>O, the soln. is centrifuged, decanted and dried.  
 The affinity is estd. from the total color of the residue. The principle (removal of  
 syrup) of both methods is the same. The approach is different. Method (1) uses an  
 excess of H<sub>2</sub>O and expresses the affinity by the quantity of dissolved sugar and salts.  
 A more complete removal of the syrup into soln. is indicated by a high salt content in  
 the retained liquor. In 120 detns. the grading according to the 2 methods agreed in  
 75% of the detns. Causes for the discrepancies in the remaining detns. are analyzed  
 but remain unconvincing to the authors. Further expts. are promised. A relatively  
 high polarization in the first soln. indicates a fine grain of irregular size; high elec. cond.  
 indicates a poorly refined sugar with irregular grains and with syrup between the grains  
 or lumps of even crystals. FRANK MARSH

ASB-SL-6 METALLURGICAL LITERATURE CLASSIFICATION

1ST AND 2ND COVERS  
PROCESSES AND PROPERTIES INDEX

16-III-2

BC

Alteration of sweet dried (beet) slices during storage. K. ŠANDERA and C. A. RUDKA (Z. Zuckerind. Czechoslov., 1931, 55, 290-303). Samples of beet slices dried by the Oxford process at Kynaham factory were stored for 18 months under various indoor conditions. No deterioration occurred under normal conditions with temp. variations of 10-30°. Access of air tended to lower the invert sugar content. Very drastic deterioration occurred in the warm, moist air of a glasshouse. J. H. LANK.

ALPHABETICAL LITERATURE CLASSIFICATION

ALPHABETICAL LITERATURE CLASSIFICATION

ALPHABETICAL LITERATURE CLASSIFICATION

PROCESSES AND PROPERTIES INDEX

The digestibility of the protein mud obtained from the defecation of diffusion juice. 28

K. SANDREA AND C. A. RULIČKA. *Z. Zuckerind. Technol. Rep. 55, 415-9(1931)*.  
 See C. A. 25, 4731 I. P. LUNTE

450.35.4 METALLURGICAL LITERATURE CLASSIFICATION

1931 119.02194

147260 24

1931 119.02194

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1931 119.02194

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RUZICKA C. A. BC

B-III 2

**Conductometric determination of the affining values of raw (beet) sugars.** K. SANDERA and C. A. Ruzicka (*Z. Zuckerind. Czechoslov.*, 1931, 55, 425-431).

A standardized affination test for raw sugars would often furnish more useful information than the conventional ramolument. Comparative study of Sandera's test (B., 1928, 344) and that of Spangler and Brendel (B., 1927, 730; 1928, 30), as applied to 120 Czechoslovakian raw sugars, shows the necessity for an agreed definition of affining value, taking account of the various factors involved. J. H. LANK.

ASB-11A METALLURGICAL LITERATURE CLASSIFICATION

RUZICKA, D.; BEZDEK, I.

"Structure of gray and white cast iron at high temperatures. p. 225."

SLEVAŘENSTVÍ. Praha, Czechoslovakia. Vol. 3, no. 8, Aug. 1955.

Monthly list of East European Accessions (FEAI), IC, Vol. 8, No. 6, Jun 59, Unclas.

R U Ž I Č K A, D

C Z E C H

Electron-Micrographic Study of the Decomposition Products of Undercooled Austenite. L. Boudík and D. Růžicka. (*Hutnická Listy*, 1954, 9, (13), 719-727). [In ~~Czech~~ two structures found in the decomposition products of austenite in a 1% C, 0.05% V-Poldi tool steel in the upper and lower bainite zones, in the pearlite zone, and in the transition zone between these phases are discussed on the basis of electron micrographs. Optical and electron micrographs at 500, 5000, and 10,000 diameters are compared.—P. P.]

(A) 15

of m

LFH

RUZICKA, DALIBOR

3

✓ 15374\* Structure of Grey and White Cast Irons at High  
 Temperatures. Struktura sive a biele litiny za vysokych  
 MG teplot. (Czech.) Ladislav Bezdek and Dalibor Ruzicka.  
Slodrenski, v. 3, no. 8, Aug. 1955, p. 225-235.  
 Special microscope, specimen preparation, and techniques are  
 described. Applied to study of primary austenite dendrite struc-  
 ture, and other formations at 1000 C. Diagrams, photograph,  
 micrographs.

Handwritten initials and a circled '1'.

RUZICKA, D.

18  
Metallographic Study of Structural Changes During Tempering of High Carbon Steel S.L. Baudik and U. Ruzicka  
(Problems and Perspectives of Czechoslovak Metallurgy and Foundry, 1958, 90-103). A systematic optical and electron micrographic study of quenched 1.12% C steel tempered in the range 50°-700° C is reported. Dilatometric studies, microhardness of martensite and residual austenite and their relation to tempering conditions are reported and correlated with structure.

rs

RUZICKA, D.

The Scope of Electron Reflection Microscopy in the Study of the Structure of Metals. A. Delong, V. Drabos, L. Bezdak, and D. Ruzicka. *Hutnické Listy*, 1966, 12, (6) 355-363. [In Czech]. The new Czechoslovak table-model electron microscope, adaptable to reflection microscopy with resolutions of 400A, is used in a study of structures, mostly pearlitic, of carbon steels, as a function of carbon content. Cementite coagulation and other phenomena were observed, and are illustrated by 35 micrographs. — P. 2.

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4/20  
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511

*Ruzicka, Delibor*

CZECHOSLOVAKIA/Electronics - Electron Microscopy

H-4

Abs Jour : Ref Zkur - Fizika, No 10, 1958, No 23314

Author : \*D~~o~~long Armin, \*Drshos Vladimir, \*\*Bezdek Ladislav, \*\*Ruzicka  
Delibor

Inst : \*Laboratory for Electron Optics, CSAB, Brno; \*\*VTAAZ Lab-  
oratory on the Study of Properties of Metals CSAB, Brno, Czech-  
oslovakia

Title : Possibility of Application of Electron Emission Microscopy  
for the Study of the Structure of Metals.

Orig Pub : Hutnicke listy, 1957, 12, No 3, 206-215

Abstract : Description of an attachment to the Czechoslovak electron  
microscope, which makes it possible to use the latter as an  
emission microscope. With the aid of this attachment the  
authors, using the thermoelectronic emission of metallo-  
graphic specimens activated with barium (by depositing this  
metal in vacuum by evaporation), have investigated the struc-  
ture of carbon steels and also certain processes connected  
with the changes in the structure.

Card : 1/1

*Puzicka, Dalibor*

High- and low-temperature microscopy. Piemyl Ryš  
Ladislav Bezděk, Karel Čiha, Dalibor Puzicka, and Jiří  
Skarek (Czechoslov. akad. věd, Prague). Rozprawy Česko-  
slav. akad. věd, Řada tech. věd 67, No. 3, 67 pp. (1967) (Eng-  
lish summary).—A new low-temp. (to  $-196^{\circ}$ ) and high-  
 temp. (to  $600^{\circ}$ ) microscope for examn. of metals is de-  
 scribed. The principles of detn. of the structure of metals  
 and alloys by thermic etching and especially the thermic  
 microscopy of steel was discussed. 27 references.  
 Alexej B. Bokkova

8  
1-4E46

*Ruzicka, Dalibor*

CZECHOSLOVAKIA/Solid State Physics - Phase Transitions in Solids E-6

Abs Jour : Ref Zhur - Fizika, No 11, 1958, No 25228

Author : Rys Franyzl, Bezdek Ladislav, Ciha Karel, Ruzicka Dalibor,  
Skarok Jiri

Inst : Not Given

Title : Investigation of Metallic Structures at High and Low Tem-  
peratures.

Orig Pub : Acta techn. (Ceskosl.), 1958, 3, No 1, 58-83

Abstract : A description is given of the apparatus and of a procedure  
from metallographic investigation of metals and alloys at  
high ( $\sim 600^{\circ}\text{C}$ ) and low ( $-196^{\circ}\text{C}$ ) temperatures. The high-  
temperature microscope makes it possible to carry out direct  
observation of the specimen at high temperatures in vacuum  
or in a protective atmosphere. Heating of specimens is carried  
out by passage of electric current, or else by heat transfer  
from the furnace (eight specimens can be heated simultaneously).  
In the former case the rate of heating is  $\sim 1500^{\circ}/\text{minute}$ , in  
the second it is  $\sim 300^{\circ}/\text{minute}$ ; with an accuracy of  $\pm 0.5\%$ .

Card : 1/2

LICHY, Jaroslav, RUCICKA, Dezider

The Hrinova water reservoir. Vodni hosp 14 no.10:381-385 '64.

1. Toprastav, Hrinova.

RUZICKA, D.

Distr: 4E2c(m)

✓ Metallographic study of structural changes during tempering of high-carbon steel. <sup>3</sup> L. Bezdík and D. Ruzicka. *Problems and Perspectives Czechoslov. Met. and Foundry* 1956, 90-103.—A systematic optical and electron-micrographic study of quenched 1.42% C steel tempered in the range 50-700° is reported. Dilatometric studies, microhardness of martensite and residual austenite, and their relation to tempering conditions are reported and correlated with structure. From *J. Iron Steel Inst.* 187, 377(1957).

3  
1-mgc(jd)

gt

~~DALIBOR~~, R U Z I C K A

CERNOHORSKY, M

24(6) PRAHE I BOOK EXPLORATIONS CURR/3360

Mikš, František, Academician, Aled Vetiška, Doctor, Engineer; Jiří Škarek, Engineer (Part 1); Karel Čihák, Engineer; Martin Černomírský, Doctor; and Dalibor Ruzicka, Engineer (Part 2)

Kaňka o materiálu. II. 1. svazek; 2. svazek (The Science of Materials. Vol. II. Part 1 and Part 2) František Mikš, Academician, Czechoslovakian Akademie Věd, 1959. Part 1, 658 p., Part 2, 669 p. Hard slip inserted. 4750 copies printed.

Sponsoring Agency: Československá Akademie Věd, Science Technická.

Scientific Ed.: Ladislav Jeníček, Professor, Engineer, Doctor; Reviewers: Jaroslav Másc, Professor, Engineer, Doctor, Josef Štrob, Engineer, Vladimír Kačavský, Doctor, Milif Roubal, Engineer, Josef Vodešálek, Engineer; Zdeněk Ministr, Engineer, and Antonín Fingerland; Resp. Ed. Ladislav Erduša; Tech. Ed.: Jaroslav Krubý.

PURPOSE: This book is for engineers and technicians in the field of mechanical engineering, specializing in the strength of materials.

COVERAGE: This is the second volume of an exhaustive work entitled "Science of Materials".

Card 1/41

Materials". The volume comprises two parts published as two books. Subjects covered include test methods and the mechanical properties of materials (metals). The first part is devoted to testing methods and apparatus used in testing the strength of materials. Both Western, Soviet, and East European sources are used. There are 45 references in Part 1. The second part covers the remaining methods for the study of metals: thermal methods, dilatometry, radiography, microscopy, and includes a detailed description of the principles and techniques of metallographic microscopy. There are 61 references in Part 2.

TABLE OF CONTENTS:

- 1. Mechanical Testing
  - Basic concepts of the mechanical testing of metals
  - 11. Static mechanical testing
    - 11.1 Tensile test
    - 11.11 Stress generation during tension tests
    - 11.12 Tensile stress-strain diagrams

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19  
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RUZICKA, E.

SCIENCE

Periodical COLLECTION OF CZECHOSLOVAK CHEMICAL COMMUNICATIONS. SBORNIK CHEKHOSLOVATSKIKH  
KHIMICHESKIKH RAPOT. Vol. 23, no. 1, Jan. 1958.

RUZICKA, E. Resazurin and some of its derivatives as analytic reagents. In German. p. 142.

Monthly List of East European Accessions (EEA I) LC, Vol. 8, no. 3, March, 1959. Uncl.

RUZICKA, E.

Polycyclic complex salts of ethylenediamine-bis-acetyl-  
acetone. Arnošt Okáč and Eduard Ruzicka (Přirodově-  
decká fak., Brno, Czech.). Chem. Listy 47, 809-7 (1953).  
[MeC(OH):CHCMe:NCH<sub>2</sub>]<sub>2</sub>, m. 110-11°, forms with Cu,  
Ni, Co, and Cd colored complex salts, insol. in H<sub>2</sub>O, sol. in  
org. solvents, crystg. with 2 moles of H<sub>2</sub>O, NH<sub>3</sub>, CaH<sub>2</sub>N, or  
their combinations: Cu, m. 142° (2H<sub>2</sub>O, H<sub>2</sub>O.NH<sub>3</sub>, H<sub>2</sub>O.  
C<sub>4</sub>H<sub>8</sub>N); Ni, m. 154° (2 C<sub>4</sub>H<sub>8</sub>N); Co, m. 162° (H<sub>2</sub>O.NH<sub>3</sub>,  
H<sub>2</sub>O.C<sub>4</sub>H<sub>8</sub>N); Cd, m. 278° (decompn.) (H<sub>2</sub>O.C<sub>4</sub>H<sub>8</sub>N).

M. Hudlíček

MS 93

~~Ruzicka, E.~~  
RUZICKA, E.

CZECHOSLOVAKIA/Analytical Chemistry - Analysis of Organic  
Substances

G-3

Abs Jour : Referat Zhur - Khimiya, No 2, 1957, 4868  
Author : Kurash, M., ~~Ruzicka, E.~~  
Inst :  
Title : Analytical Reactions of Some Amidoximes. VII. Amidoxime  
of Malonamide  
Orig Pub : Sb. chekhosl. khim. rabot, 1956, 21, No 4, 1075-1077  
Abstract : See RZhKhim, 1956, 68600.

Card 1/1

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CA

7

A specific reaction for mercurous ion. M. Kuraš and R. Ružička (Univ., Palacky, Olomouc). *Collection Czechoslov. Chem. Commun.* 15, 147-9(1950)(in French). The test depends on the formation of a brown ppt. with  $\text{Me}_2\text{COHC}(\text{NH}_2)\text{NOH}$  (I). I is prepd. by refluxing 2.3 g. Na dissolved in 60 ml. abs. EtOH, 7 g.  $\text{NH}_4\text{OH}$  in a min. amt. of EtOH, and 8.5 g.  $\text{Me}_2\text{C}(\text{OH})\text{CN}$  for 2 hrs. on the steam bath, filtering, and concg. to crystn., m. (from Et<sub>2</sub>O) 52°. I is sol. in H<sub>2</sub>O, EtOH, Et<sub>2</sub>O, and C<sub>6</sub>H<sub>6</sub>, and unstable in air, but stable in EtOH. On filter paper add a drop of 2% I in 50% EtOH to a drop of test soln., and hold in  $\text{NH}_3$  vapors. A brown spot shows the Hg salt of I. Sensitivity is 0.2 [B]0.04 and diln. is 1:2 X 10<sup>6</sup>. The test carried out in a test tube with one drop of test soln., 3 drops of reagent soln., and one drop 10%  $\text{NH}_4\text{OH}$  has a sensitivity of 10 [B]1 and a diln. of 1:10<sup>6</sup>.  $\text{Cl}^-$  interferes in both tests.

K. G. Stone

CA

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Analytical reactions of some amide oximes. I. M. Kúral and B. Rábička (Palacký Univ., Olomouc). *Chem. listy* 44, 41-2 (1950).—Formamable oxime (I) forms a yellow ppt. with  $Hg^{II}$  and a dark-gray ppt. with  $Hg^I$ . A 5% soln. of I is used. II. Amide oxime of homoveratric acid. *Ibid.* 90-1.—The amide oxime (I) of homoveratric acid was prepd. by refluxing 8 hrs. a mixt. of 6 g. homoveratronic nitrile, 9 g.  $NH_4OH.HCl$ , and 150 ml. 50% EtOH with a satd. soln. of  $Na_2CO_3$ . After the evapn. of EtOH I crystal. in colorless prisms, m.  $137^\circ$  (from EtOH). I is sol. in hot water, EtOH, MeOH, and  $CHCl_3$  and insol. in Et<sub>2</sub>O, Me<sub>2</sub>CO, and toluene. A 5% soln. of I was used as a reagent. It gives a dirty-green ppt. with Cu, a reddish brown color with  $Fe^{III}$ , a pale-yellow ppt. with  $Hg^{II}$  and a reddish violet color with Ni in the presence of  $H_2O_2$  and a drop of  $NH_3$ . Cu and Hg salts were isolated. M. Hudlický

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Analytical reactions of some amidoalines. III. Amidoalines of  $\alpha$ -hydroxyisobutyric acid. M. Kuraš and E. Rubička (Palacký Univ., Olomouc, Czech.). *Chem. Listy* 45, 37-8 (1951); cf. *C.A.* 45, 8572i. —  $M_2C(OH)C(NH_2)_2$ :  $NOH$  (1) 2% soln. in 80% EtOH gives with  $Hg^{+}$  a white ppt. which turns brown after the addn. of  $NH_3$ . Prepn. of I: 8.5 g.  $M_2C(OH)CN$  was refluxed 2 hrs. with a soln. of 0.1 mole  $NH_2OH$  in EtOH. I crystal. after evapn., m. 52° (from ether), yield 80-70%. M. Hudlický

1957

COUNTRY : Czechoslovakia E-1  
CATEGORY : Analytical Chemistry - General  
ABS. JOUR. : RZhKhim., No. 77, 1959, No. 67600  
AUTHOR : Huzicka, E.  
TITLE : 7-Amino-4-methyl-Phenoxazone-(2) as an analytical reagent.  
ORIG. PUB. : Chem. listy, 1958, 51, No 9, 1716-1719;  
Collect. czechosl. chem. commun., 1959, .  
ABSTRACT : 7-Amino-4-methyl-phenoxazone-(2), (circiruf-  
anin) (I), prepared from orcin and quinine dichloride,  
dissolves in 90% C<sub>2</sub>H<sub>5</sub>OH to a red-violet solution with a  
yellow-orange fluorescence. In alkaline sodium fluorescence  
disappears, while coloration of the solution is enhanced;  
in acid medium the solution acquires a red coloration. In  
2 N HCl, I is reduced by Sn<sup>2+</sup>, Ti<sup>3+</sup> and Cr<sup>2+</sup> ions to the  
colorless leuco-compound 7-amino-2-hydroxy-4-methyl-phen-  
oxazine, which is re-converted to I on oxidation with the  
oxygen of the air; in 2 N HCl, decoloration of I is also  
effected by BrO<sub>3</sub><sup>-</sup> ions. In concentrated HCl, ClO<sub>3</sub><sup>-</sup>, BrO<sub>3</sub><sup>-</sup>,  
and IO<sub>3</sub><sup>-</sup> ions can be detected by a change of the color of  
IARD: 1/4

930-931.

COUNTRY : Czechoslovakia  
CATEGORY :

E-1

ABS. JOUR. : RZKhim., No. 19, 1959, No. 67600

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : I is yellow-green; the different behavior of  $BrO_3^-$  makes it possible to detect  $BrO_3^-$  even in presence of  $ClO_3^-$  and  $IO_3^-$ , which produce in 2-4 N HCl, with I, a blue-violet coloration. In 5 N HCl, I is decolorized by  $Fe^{2+}$ ,  $S^{2-}$ , and  $S_2O_3^{2-}$  ions;  $HO_2^-$  ions change the red color of I to yellow-brown. In the presence of oxidizing agents ( $H_2O_2$ ,  $S_2O_8^{2-}$ ) the solution of I acquires a blue-violet coloration which disappears gradually; in the presence of  $Hg^{2+}$  a blue-violet color develops, and at pH 7.5 a blue-violet precipitate is formed. In alkaline media I is decolorized by  $ClO^-$  and  $[Sn(OH)_3]^-$  ions, and also by  $Fe(OH)_3$  and  $Fe(OH)_2$ ; alkaline solution of I is colored

CARD: 2/4

COUNTRY : Czechoslovakia  
CATEGORY :

E-1

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ABS. JOUR. : RZKhim., No. 19, 1959, No. 67600

AUTHOR :  
INST. :  
TITLE :

ORIG. PUB. :

ABSTRACT : blue-violet by chlorine, bromine, and iodine. In neutral and weakly acidic medium I is quantitatively halogenized by bromine- and chlorine water; at the same time a corresponding change in color occurs. On the basis of these properties of I, procedures have been worked out for the detection of various ions, in a test tube as well as on filter paper; sensitivity (pD) of individual reactions has been determined. On the basis of the reaction of halogenation of I (for example,  $C_{13}H_{10}O_2N_2 + 2Cl_2 \rightarrow C_{13}H_8O_2N_2Cl_2 + 2HCl$ ) procedures have been developed for potentiometric titration of  $Cl_2$  and  $Br_2$ ; determination of  $Cl_2$  and  $Br_2$  is interfered with by  $ClO^-$ ,  $ClO_3^-$ ,  $BrO_3^-$ ,  $IO_3^-$ ,

CARD: 3/4

CARD: 4/4