RAKHEYEVA, V. N.

USSR/Chemistry - Rearrangements, Allylic
Chemistry - Allyl Groups

"Acetylene Derivatives. 82. Regrouping of the Allyl System. II. Isomerization of Dialkylene-Vinyl-Carbinols in Esterification Reactions. The Methyl Esters of and Dialkylene-Allyl Alcohols," I. N. Nazarov, I. N. Azerbayev, V. N. Rakcheyeva, In t Org Chem, Acad Sci USSR, 7 pp

"Zhur Obshch Khim" Vo. XVIII (LXXX), No 3, 1948

dialkylallyl alcohols revert by isomerization to -dialkylallyl alcohols when the former is in methanol solutions containing small amounts of sulfuric acid. There is a simultaneous esterification with a resultant formation of a methyl ether and -dialkylallyl alcohol mixture. Submitted 7 Apr 1947.

PA 69/77

RAKCHEYEVA, V. N.

Apr 48

USSR/Chemistry - Acetylene, Derivatives
Chemistry - Rearrangements, Allylic

"Acetylene Derivatives: No 64, Regrouping of the Allyl System," I. N. Nazarov, I. N. Azerbayev, V. N. Rakcheyeva, Inst Org Chem, Acad Sci USSR, 9 pp
"Zhur Obshch Khim" Vol XVIII (LXXX), No 4

Studies action of gaseous hydrogen chloride on methylpropylvinylcarbonal and its is omer 8-methyl-8-propyllylcarbonol. Gives quantitative extimate of isomeric chlorides formed. Shows primary chloride predominates. Studied some exchange reactions of the chlorides obtained. Submitted 7 Apr 1947

PA 8/49T39

RAKCHEYEVA, V.N.

USSR/Chemistry - Acetylene Derivatives Apr 52

"Acetylene Derivatives. 135. Regrouping of the Allyl System. V. Exchange Reaction of γ,γ-dimethylallychloride With Amines, Potassium Cyanide, and Salts of Organic Acids," I. N. Nazarov, V. N. Rakcheyeva, L. I. Shmolina, Inst of Org Chem, Acad Sci USSR

"Zhur Obshch Khim" Vol XXII, No 4, pp 611-617

In the action of γ, γ-dimethyl allyl chloride with diethyl amine and piperidine, an approx 70% yield of the corresponding tertiary amines contg the γ, γ-dimethyl allyl radical is formed. This exchange reaction proceeds normally and is not accompanied by allyl regroupings. The reaction of the above with KCN and HCOONa is analogous. 224T37

RAKCHEYEVA, V.N.

USSR

Heterocyclic compounds. XXIX. Stereoisomerism of 2,5-dimethyl-4-piperidinol, 1,2,5-trimethyl-4-piperidinol, and their derivatives. I. N. Nazarov, D. V. Sokolov, and V. N. Rakcheyeva. *Bull. Acad. Sci. U.S.S.R., Div. Chem. Sci.* 1954, 65-76(Engl. translation).—See *C.A.* 49, 6248a. XXX. Condensation of 4-piperidinones with formic, oxalic, carbonic, and chlorocarbonic esters. Synthesis of cocaine analogs. I. N. Nazarov, D. V. Sokolov, and G. S. Litvinenko. *Ibid.* 77-87.—See *C.A.* 49, 6250c.
H. L. H.

RAKCHEYEVA, V.N.

USSR

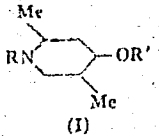
Heterocyclic compounds. XXIX. Stereoisomerism of 2,5-dimethyl-4-piperidinol, 1,2,5-trimethyl-4-piperidinol, and their derivatives. I. N. Nazarov, D. V. Sokolov, and V. N. Rakcheyeva. *Izvest. Akad. Nauk S.S.S.R., Otdel. Khim. Nauk* 1954, 80-94; cf. *C.A.* 44, 3460*e*; 48, 9371*i*.—To 12.7 g. 2,5-dimethyl-4-piperidinone in 350 ml. abs. EtOH was added 35 g. Na, and the mixt. heated to complete the reaction, dild. with H_2O, acidified with HCl, filtered, concd., treated with NaOH, and extd. with Et_2O, yielding a distillate of *isomeric* I (R = R' = H) (II), b_1 101–2°; the cryst. portion (7.3 g.) was the *α-form* (IIα), m. 97–8° (from ligroine) (*picrate*, m. 173–4°; *HCl salt*, m. 222–3°); the mother liquor yielded an uncrystallizable isomeric mixt. which was benzoylated yielding 1 g. *γ-form* (IIIγ), m. 160°, of *1-benzoyl-2,5-dimethyl-4-piperidinol* (I, R = Bz, R' = H) (III). Reduction in EtOH over Raney Ni in the presence of a little 20% NaOH gives the *β-form* (IIβ) of II, m. 141–2° (from petr. ether) (*picrate*, m. 179–80°; *HCl salt*, m. 209–10°); the mother liquor on benzoylation yielded 50%

(over)

1/8

Inst. Chem. Sci., AS USSR

IIIγ. Electrolytic reduction of 20 g. of the piperidone on a Pb cathode in 10% $(NH_4)_2SO_4$ at 20° and c.d. 0.029 amp./sq. cm. gave in 5 hrs. 2.2 g. IIβ. Treatment of 2,5-dimethyl-4-piperidone with BzCl in dil. NaOH gave the *1-Bz deriv.*, b_4 192–3°, m. 64–5° (from petr. ether) (*2,4-*



(I)

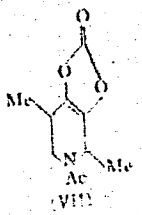
dinitrophenylhydrazone, m. 211–12°). This (21.4 g.) hydrogenated over Raney Ni in EtOH in the presence of a little 20% NaOH yielded (from 4 combined runs) 120 g. *isomeric* III; crystn. from C_6H_6 gave 47 g. pure IIIγ, m. 159–60° (*phenylurethan*, m. 178–9°), while the mother liquor on addn. of petr. ether gave 30 g. mixed IIIα and IIIβ forms, m. 88–95°. Heating IIIγ (10 g.) 35 hrs. on a steam bath with 100 ml. 18% HCl gave 4 g. *γ-form* (IIγ) of II, b_2 82–4°, m. 86–7° (from petr. ether) (*picrate*, oil; *HCl salt*, m. 187–8°). Similar hydrolysis of IIIα and IIIβ gave IIα and IIβ, m. 93° and 142°, resp.; IIβ ppts. directly from Et_2O, while IIα is sepd. as the HCl salt. Thus, electrolytic reduction yields IIα, IIβ, and IIγ. Heating 37.2 g. 2,5-dimethyl-4-piperidinone with 36 g. Ac_2O 30 min. on a steam bath gave, after evapn. *in vacuo* and washing with NaOH, 43 g. *1-acetyl-2,5-dimethyl-4-piperidinone*, b_4 122–4°, n_D^{25} 1.4913, d_{20} 1.0792, m. 56–7° (from petr. ether); the same substance (b_2 117–18°, n_D^{25} 1.4925, d_{20} 1.0816) formed on treatment of the ketone in dioxane with CH_2:CO

2 hrs.; *2,4-dinitrophenylhydrazone*, m. 177–9° (from EtOH). Hydrogenation of the Ac deriv. over Raney Ni in EtOH in the presence of a little 20% NaOH gave *mixed isomers*, b_2 135–8°, of I (R = Ac, R′ = H) (IV) from which was isolated about 30% *γ-form* (IVγ), m. 86–7° (*phenylurethan*, m. 222–3°). This refluxed with 18% HCl 30 hrs. gave the above described IIγ, m. 86–7°. Refluxing 4 g. IIβ with 7 g. Na in 50 ml. iso-AmOH 43 hrs. at 130–60° gave after the usual treatment 1.2 g. IIα, m. 96–8°. Similarly IIβ gave a low yield of IIα. IIα with BzCl in aq. NaOH gave IIIα, m. 136–7°. Similarly, IIβ gave the *corresponding* IIIβ, m. 134–5°. Heating 5 g. IIα.HCl with 8 g. BzCl 1 hr. at 140–50° gave after soln. in H_2O and extn. with Et_2O, 2.2 g. IIIα, b_4 164–5°, n_D^{25} 1.5240, d_{20} 1.0623 (*picrate*, m. 191–5°; *HCl salt*, m. 265–6°). Similarly IIβ.HCl gave the *corresponding* IIIβ, b_7 166°, n_D^{25} 1.5250, d_{25} 1.0860 (*picrate*, m. 235–6°; *HCl salt*, m. 167–8.5°). Heating IIIγ (m. 159–60°) (10 g.) with 10 g. BzCl to 170° until HCl evolution stopped, followed by passage of dry HCl at the same temp. 2 hrs. gave a ppt. of the HCl salt, which was sepd. and treated with aq. Na_2CO_3, yielding 5.5 g. *benzoate* (I, R = R′ = Bz) (V) of IIIγ, b_5 125–6°, n_D^{25} 1.5265, d_{25} 1.0633 (*picrate*, m. 173–4.5°; *HCl salt*, m. 253–4°). Treatment of the benzoate of IIα with BzCl in 10% NaOH gave Vα, m. 92–3° (from petr. ether). Similarly was obtained Vβ, m. 92–3°. Refluxing 3 g. IIIγ with 5 g. BzCl in C_6H_6 24 hrs. gave 2.5 g. Vγ, m. 117–18°. Heating 2 g. IIIα, m. 136–7°, with 4 g. Ac_2O and 1 drop H_2SO_4 7.5 hrs. at 60° gave 2.5 g. α-form (VIα) of I (R = Bz, R′ = Ac) (VI), b_4 187–9°, n_D^{25} 1.5200. Similarly IIIβ gave VIβ, m. 125–6°, while IIIγ gave VIγ, m. 92.5–3°. Heating 3.8 g. 32% formalin with 3.2 g. 90% HCO_2H and 5 g. IIα on a steam

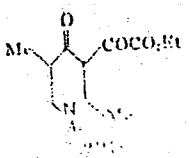
bath 6.3 hrs. gave 4.7 g. *α-form* (VII$_\alpha$), b_4 87–9°, n^{25}_D 1.4730, d_{25} 0.9541, m. 72–3° (*picrate*, m. 142–3°; *HCl salt*, m. 195–6°), of I (R = Me, R' = H) (VII). Similar methylation of II$_\beta$ gave the *β-form* (VII$_\beta$), m. 77–8° (*picrate*, m. 181–2°; *HCl salt*, hygroscopic crystals). Heating 4.5 g. VII$_\alpha$.HCl with 6 g. BzCl 20–30 min. to 150° gave after treatment with H_2O, extn. with Et_2O, and treatment with Na_2CO_3, 5.2 g. *α-form* (VIII$_\alpha$) of I (R = Me, R' = Bz) (VIII), b_2 135–6°, n^{25}_D 1.5170, d_{25} 1.0315 (*picrate*, m. 199–200°; *HCl salt*, m. 201–2°). Similarly VII$_\beta$ gave the corresponding VIII$_\beta$, b_2 128–30°, n^{25}_D 1.5190, d_{25} 1.0440 (*picrate*, m. 217–18°; *HCl salt*, uncrystallizable mass). Heating 4.55 g. IV$_\gamma$ with 1.68 g. 32% formalin and 1 g. 90% HCO_2H 40 min. on a steam bath gave 4.1 g. (VIII$_\gamma$), $b_{2.5}$ 136–7°, n^{25}_D 1.5195, d_{25} 1.0390 (*picrate*, m. 181–2°; *HCl salt*, m. 178–9.5°), which, heated 2 hrs. with 25% HCl on a steam bath, gave BzOH and VII$_\gamma$, b_4 88° (*picrate*, m. 167–8°; *HCl salt*, hygroscopic solid). Partial evapn. of 0.5 g. 2,5-

1.4975, d_{25} 1.1245 (with $FeCl_3$ this gives an intense red color). The same product formed in 36.5% yield in the reaction with EtONa instead of Na for 40 min. at 90°; at lower temps. the yield rises, and at room temp. in 10 days was 55%. The pure product, b_1 134–6°, n^{25}_D 1.4938, solidifies on standing, m. 65–6° (from petr. ether). Hydrolysis of this with 22% HCl 32 hrs. on a steam bath gave 2,5-dimethyl-4-piperidinone. Hydrogenation of the ester Ac deriv. in EtOH over Raney Ni gave a *mixt. of stereoisomers* of *1-acetyl-2,5-dimethyl-3-carbethoxy-4-piperidinol* (III), b_1 151–70°, which was sepd. into 5° fractions. The middle fraction, b_1 156–61°, n^{25}_D 1.4902, d_{25} 1.1185, solidified in part, yielding 1.6 g. III, m. 101–2°. The isomer mixt. (from 14.6 g. ketone) was treated in abs. EtOH with dry HCl,

(*picrate*, oil; *HCl salt*, m. 157–8°), along with 2 g. *benzoate* of VIα, b_2 167–70°, $n^{25}D$ 1.5105, d_{25} 1.0873 (*picrate*, m. 184–5°; *HCl salt*, m. 135–6°). Similar methylation of 4.1 g. IVβ, m. 158–9°, gave 88% *β-isomer* (VIβ) of VI, m. 87–8° (*picrate*, m. 168–9°; *HCl salt*, m. 174–5°); the latter HCl salt (3.7 g.) heated with BzCl to 160° as above gave 2.5 g. *HCl salt*, m. 213–14°, of *the benzoate* of VIβ, along with 1.9 g. *benzoate*, b_2 167–9°, $n^{25}D$ 1.5103, d_{25} 1.089, which solidified on standing, and m. 59–60° (from petr. ether) (*HCl salt*, m. 213–14°). To dry EtONa from 2.2 g. Na was added with cooling 7.1 g. HCO_2Et and 8.1 g. V in abs. C_6H_6, the mixt. kept 40 hrs. at room temp. in a closed flask, the ppt. sepd., washed with C_6H_6, treated with 20 ml. concd. HCl with addn. of small pieces of ice, and the soln. satd. with NaCl and extd. with C_6H_6, yielding 68% *1-acetyl-2,5-dimethyl-3-*



(VII)



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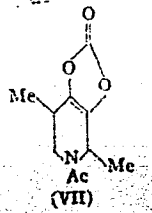
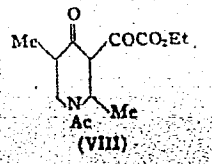
1.4075, d_{20} 1.1245 (with $FeCl_3$ this gives an intense red color). The same product formed in 36.5% yield in the reaction with EtONa instead of Na for 40 min. at 90°; at lower temps. the yield rises, and at room temp. in 10 days was 55%. The pure product, b_1 134-6°, n_D^{20} 1.4938, solidifies on standing, m. 65-6° (from petr. ether). Hydrolysis of this with 22% HCl 32 hrs. on a steam bath gave 2,5-dimethyl-4-piperidinone. Hydrogenation of the ester Ac deriv. in EtOH over Raney Ni gave a *mixt. of stereoisomers of 1-acetyl-2,5-dimethyl-3-carbethoxy-4-piperidinol* (III), b_1 151-70°, which was sepd. into 5° fractions. The middle fraction, b_1 156-61°, n_D^{20} 1.4902, d_{20} 1.1185, solidified in part, yielding 1.6 g. III, m. 101-2°. The isomer mixt. (from 14.6 g. ketone) was treated in abs. EtOH with dry HCl, refluxed 28 hrs., the ppt. filtered off, and recrystd. from H_2O to give 3.4 g. high-melting *β-isomer* (IVβ), m. 158-9° (from C_6H_6) (*picrate*, m. 204-5°; *HCl salt*, m. 198-9°), *of 2,5-dimethyl-3-carbethoxy-4-piperidinol* (IV). The EtOH soln. after the removal of the above, evapd. and subjected to treatment with dry HCl-EtOH 53 hrs. longer, yielded 1.2 g. low-melting *α-isomer* (IVα), m. 115-16° (from C_6H_6) (*picrate*, m. 142-3°; *HCl salt*, m. 185-6°). The isomer mixt. from the hydrogenation heated 60 hrs. with 10% HCl, evapd., and heated 16 hrs. longer with HCl-EtOH (dry) gave IVβ, m. 158-9°, and a smaller amt. of IVα, m. 115-16°. Heating the cryst. isomer, m. 101-2°, of III with dry HCl-EtOH 30 hrs. gave about 45% IVα, m. 115-16°. Reduction of 16.5 g. 1-acetyl-2,5-dimethyl-3-carbethoxy-4-piperidinone (V) with 750 g. 2.5% Na-Hg in 45% aq. EtOH, followed by cleavage of the Ac group with alc. HCl, gave 1.4 g. IVβ, m. 158-9°, and 5 g. mixed

isomers, $b_{1.4}$ 103–22°, from which was isolated 0.8 g. IV*α*, m. 115–16°. The isomeric mixt. of the III from hydrogenation of the ketone over Raney Ni was heated with BzCl 15 min. to 165–70°, treated with dry HCl 1 hr. at 160°, and taken up in H_2O, giving a low yield of the *2,5-dimethyl-3-carbethoxy-4-piperidyl acetate*, b_1 100–2°, $n^{25}D$ 1.4610, d_{20} 1.065, along with a similar yield of the *benzoate*, b_1 160–4°, $n^{25}D$ 1.5123, d_{20} 1.1145, both esters being *mixts. of stereoisomers*. Heating 4.4 g. IV*α* with 3.4 g. 29% formalin and 1.4 g. 90% HCO_2H on a steam bath 40 min., cooling, and treating the mixt. with K_2CO_3 soln. gave 4.3 g. *α-isomer* (VI*α*) *of 1,2,5-trimethyl-3-carbethoxy-4-piperidinol* (VI), b_1 112–13°, $n^{25}D$ 1.4778, d_{20} 1.0528 (*picrate*, m. 141–2°; *HCl salt*, m. 151–2°). The HCl salt (3.6 g.) heated with 6.1 g. BzCl to 160° 0.5 hr. gave, after evapn. of residual BzCl and treatment with H_2O, 0.7 g. *1,2,5-trimethyl-3-carbethoxy-Δ³-tetrahydropyridine*, b_8 109–10°, $n^{25}D$ 1.4765, d_{20} 0.9940 (*picrate*, oil; *HCl salt*, m. 137–8°), along with 2 g. *benzoate of* VI*α*, b_2 167–70°, $n^{25}D$ 1.5105, d_{20} 1.0873 (*picrate*, m. 184–5°; *HCl salt*, m. 185–6°). Similar methylation of 4.1 g. IV*β*, m. 158–9°, gave 88% *β-isomer* (VI*β*) of VI, m. 87–8° (*picrate*, m. 168–9°; *HCl salt*, m. 174–5°); the latter HCl salt (3.7 g.) heated with BzCl to 160° as above gave 2.5 g. *HCl salt*, m. 213–14°, of *the benzoate* of VI*β*, along with 1.9 g. *benzoate*, b_2 167–9°, $n^{25}D$ 1.5103, d_{20} 1.089, which solidified on standing, and m. 59–60° (from petr. ether) (*HCl salt*, m. 213–14°). To dry EtONa from 2.2 g. Na was added with cooling 7.1 g. HCO_2Et and 8.1 g. V in abs. C_6H_6, the mixt. kept 40 hrs. at room temp. in a closed flask, the ppt. sepd., washed with C_6H_6, treated with 20 ml. concd. HCl with addn. of small pieces of ice, and the soln. satd. with NaCl and extd. with C_6H_6, yielding 68% *1-acetyl-2,5-dimethyl-3-*

Na, Za, Pol-T.N.



(VII)



(VIII)

hydroxymethylene-4-piperidinone, m. 123–4° (from C_6H_6); if the product is distd. it forms an oil, b. 138–9°, which slowly solidifies and m. 123–4°. It gives red color with $FeCl_3$; with 2,4-$(O_2N)_2C_6H_3NHNH_2$ it forms a *pyrazole deriv.*, $C_{14}H_{17}O_5N_5$, m. 201–2°. Hydrogenation of the hydroxymethylene deriv. over Raney Ni leads to absorption of 2 moles of H. To a suspension of dry EtONa (from 4.2 g. Na) in dry C_6H_6 were added with cooling 20 g. $(CO_2Et)_2$ and 17 g. V in C_6H_6; after standing overnight at room temp. the mixt. was acidified with HCl with cooling and extd. with C_6H_6, yielding a white ppt. which was sepd. This (3.3 g.) was identified as the compd. (VII), decomp. 210°. The residual oil heated 15 min. to 150–60° yielded 12.2 g. more VII (total, 68% yield). VII is poorly sol. in org. solvents, but is sol. in alkalies, being repptd. on acidification. It gives a green color with $FeCl_3$-EtOH. Boiling VII with EtOH yields the oily material mentioned above, which is apparently *Et 1-acetyl-2,5-dimethyl-4-oxo-3-piperidineglyoxylate* (VIII). The results are similar when the condensation is run with alc. EtONa, or with Na in C_6H_6.

G. M. Kosolapoff

8/8

COUNTRY : Hungary
CATEGORY :

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

AUTHOR : Bakcsanyi, L. and Peszeszer, G.
INST. : Not given
TITLE : Amino Acids in the Lees

ORIG. PUB. : Szoeleszeti Kutato Int Evk, 11, No 2, 15-45, 195?-1957 (1958)

ABSTRACT : A practical method has been developed for the separation of amino acids (A) recovered from the lees. A clarified solution of A of purity 80% and ash content 1% is passed successively through columns packed with activated charcoal, three columns packed with Amberlite IR-4B anion-exchange resin (AER), three columns packed with the carboxyl type cation-exchange resin (CER) Amberlite IRZ-50, and a column packed with the sulfonic acid type CER Amberlite IR-120. The mixture of A is separated

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CARD: 1/2

L 59379-65 EWT(d)/EWT(m)/EWP(c)/EWP(v)/T/EWP(t)/EWP(k)/EWP(b)/EWP(l)/EWA(c)
Pf-4 JD/HM

ACCESSION NR: AP5017861 UR/0286/65/000/011/0099/0099
620.179.152

41
B

AUTHOR: Benderskiy, Ye. G.; Rakcheyev, V. N.

TITLE: A method for detecting flaws in spot-welded and contact-roller welded seams. Class 42, No. 171642

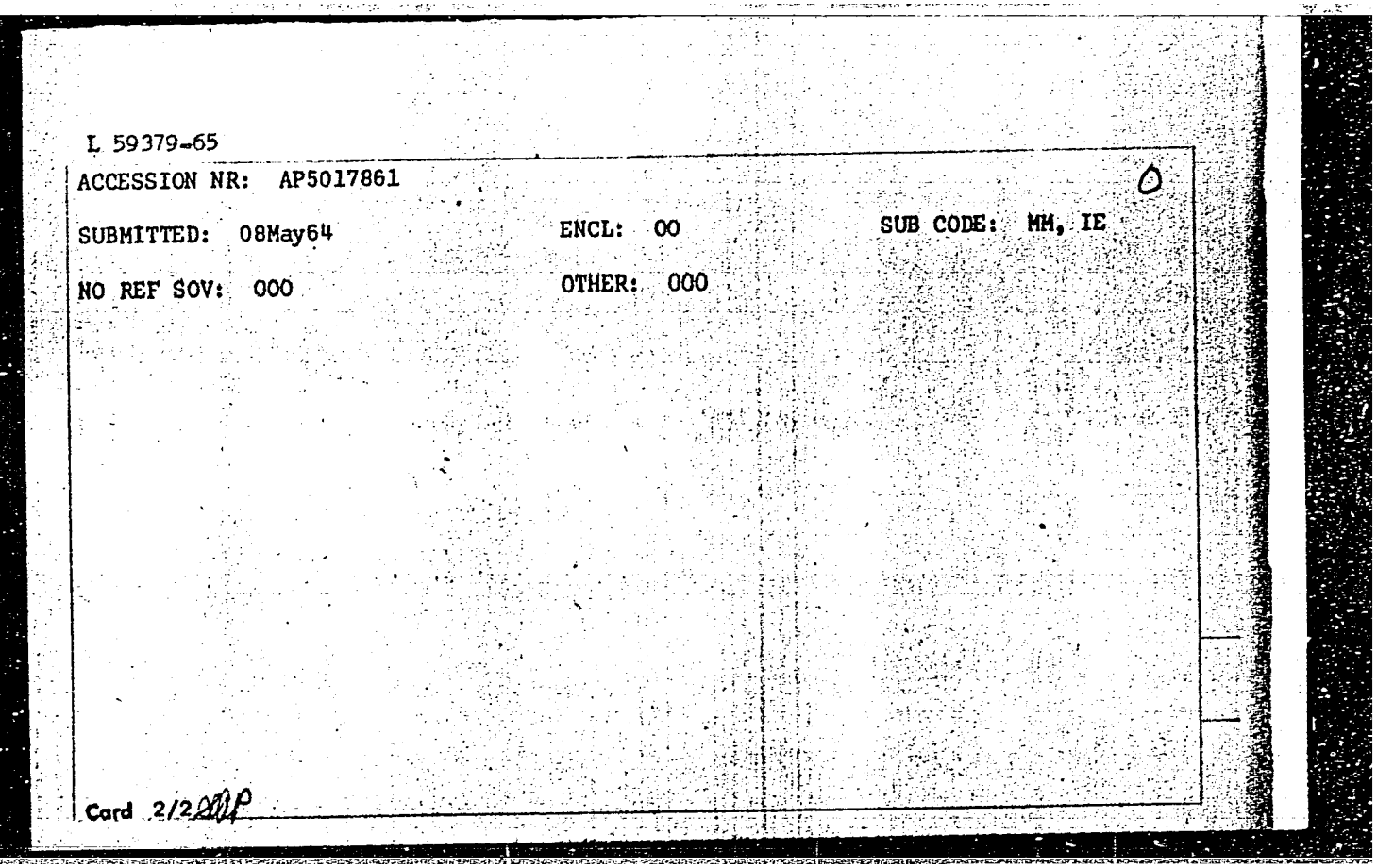
SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 11, 1965, 99

TOPIC TAGS: spot welding, resistance welding, x ray photography

ABSTRACT: This Author's Certificate introduces a method for detecting flaws in spot-welded and contact-roller welded seams. The method is based on x-ray photography. A thin layer of metal is placed between the surfaces to be joined before they are welded. This metal has a higher coefficient of radiation absorption than that of the base metal (e.g. tungsten or alloys with a high tungsten content) to give a sharper x-ray photograph of the boundary between the base metal and the molten metal.

ASSOCIATION: none

Card 1/2



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ACCESSION NR: AP5017861

SUBMITTED: 08May64 ENCL: 00 SUB CODE: MM, IE

NO REF SOV: 000 OTHER: 000

Card 2/2

RAKOSAPPI, L.

Development of the characteristics of Hungarian wines and wine specialities; also, remarks by J. Iranyos and others. p. 259.
(BORGAZDASAGI. Vol. 12, no. 1/4, 1957, Budapest, Hungary)

SO: Monthly List of East European Accessions (EEAL) LC. Vol. 6, no. 12, Dec. 1957. Uncl.

RAKCSANYI, Laszlo, prof. (Budapest XI Menesi ut. 44.)

Acceleration of the maturing process of wine and brandy. Acta chimica Hung 23 no.1/4:419-423 '60. (EEAI 10:9)

1, Forschungsinstitut fur Ampelologie, Budapest.

(Wine and wine making) (Brandy) (Ultrasonics)

No 2 Vol. F

HTA

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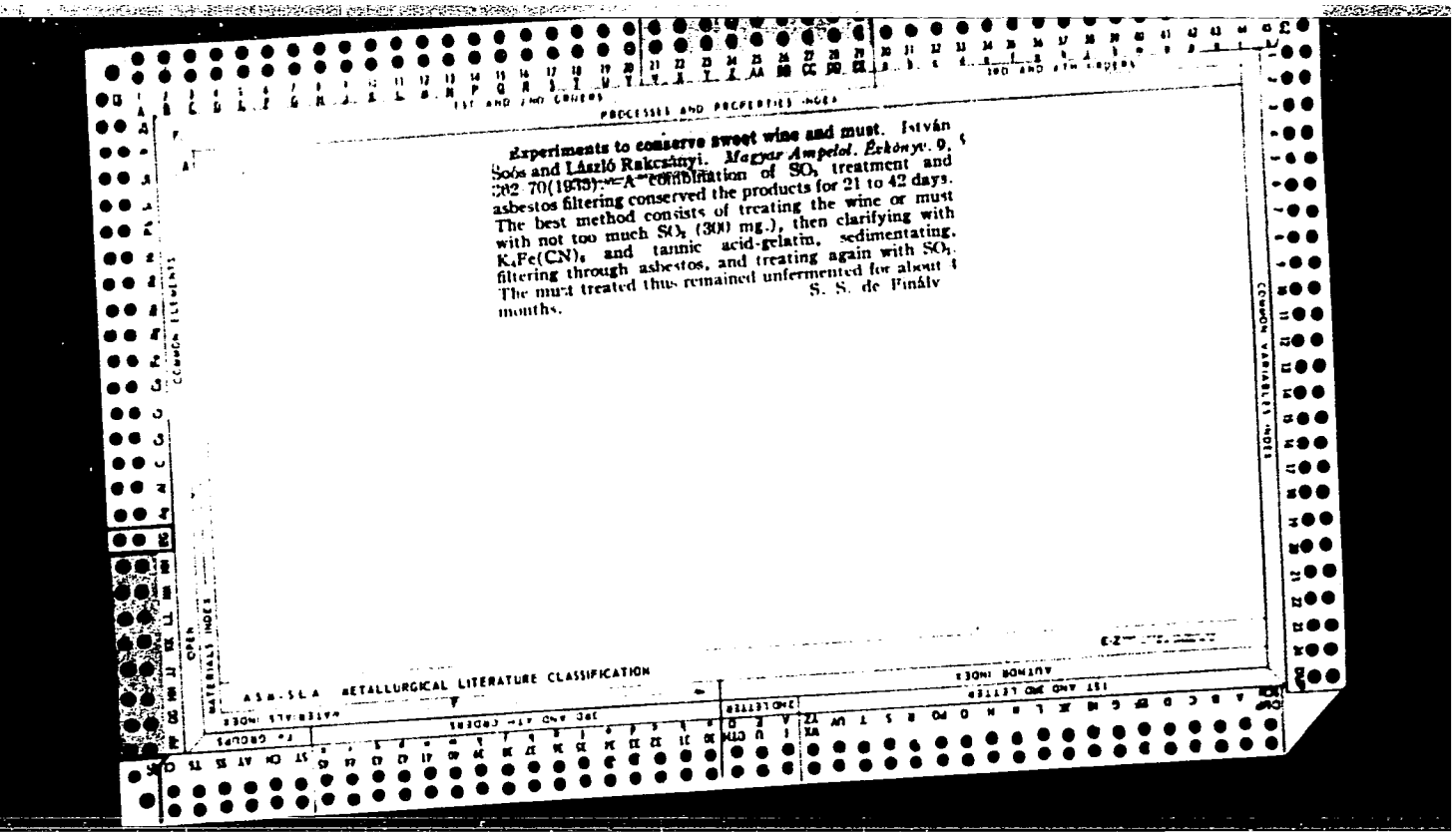
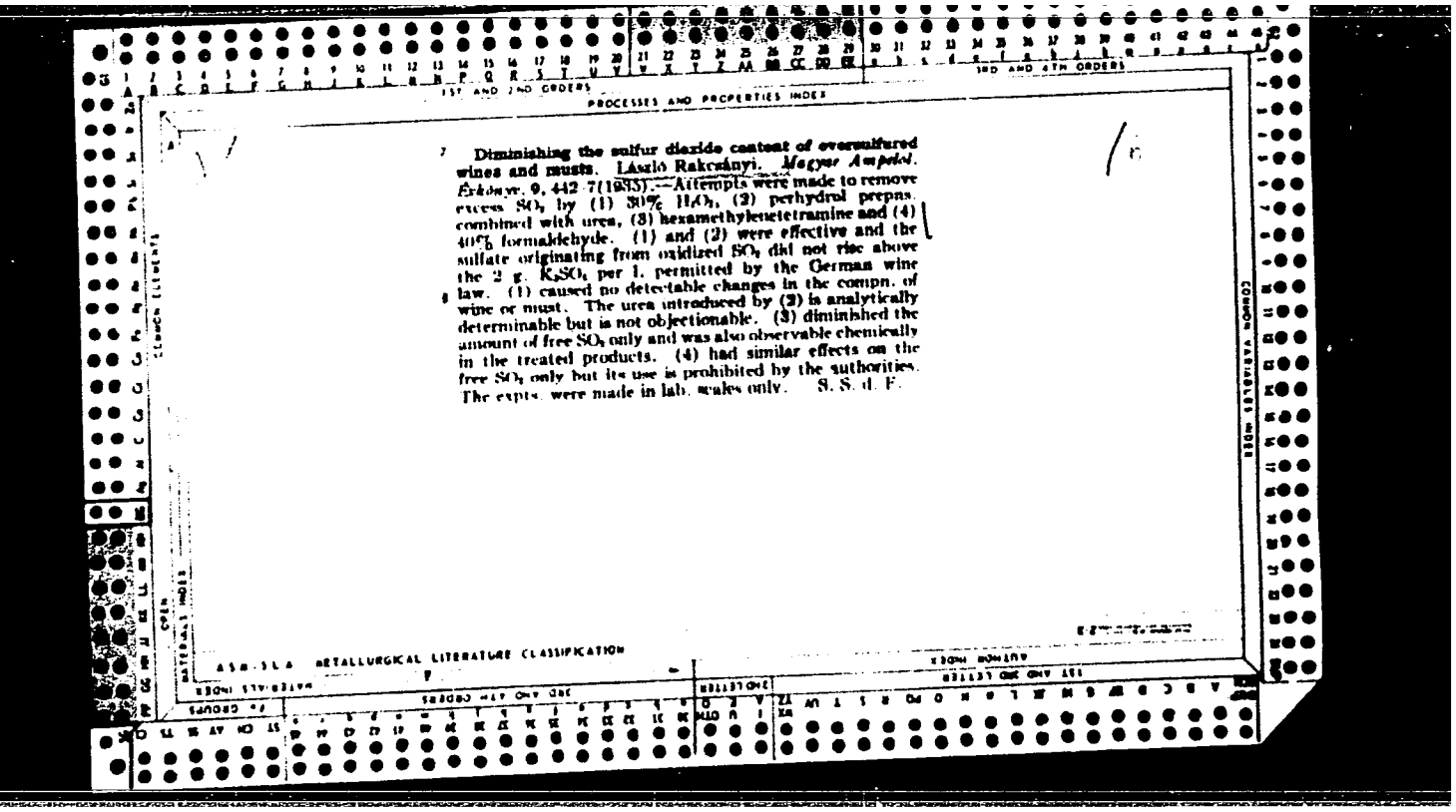
41. Factors influencing the quality of brandy (A ko-*parlat minoseget befolyasolo tenyezok*). By I. Rakvanyi. Food Industry — *Elelmezesi Ipar* — Vol. V, No. 6, pp. 181–186, June 1951.

The characteristic properties of brandy always depend upon the quality of the wine used for its production, and to a certain degree upon the after treatment as well. Wines without any special characteristics and of a medium percentage of alcohol are generally best suited for distillation. Wine processed from strongly aromatic grapes and especially those of direct producers should not be processed into brandy. Preparation for distillation begins already at vintage. Opinions differ on the proper time for starting distillation. While some experts maintain that the most opportune time for distillation coincides with the beginning of clarification, others claim that 8 to 10 month old wine is considered best. Although the accompanying fusel oils are characteristic ingredients of brandy, nevertheless large amounts are undesirable. Due to this, Hungarian brandies are distilled without bottom sediments and the brandy usually contains less oenanthic ether than, for instance, French brandies. Sulphurous acid is definitely detrimental to brandy. Based on experiences, the most favourable time for distilling under domestic conditions is the period between March and July, since beyond this term wines from the *Hungarian Plain* will lose their freshness and take on the flavour of seasoned wine, which influences the quality of the brandy as well. Wooden barrels stored in cellars of medium humidity and temperature are most suited for maturation. For enriching the oenanthic ether content of high-grade Hungarian brandy either refined pure oenanthic ether or a very good quality strong brandy matured for a long period is added to the "bonificateur".



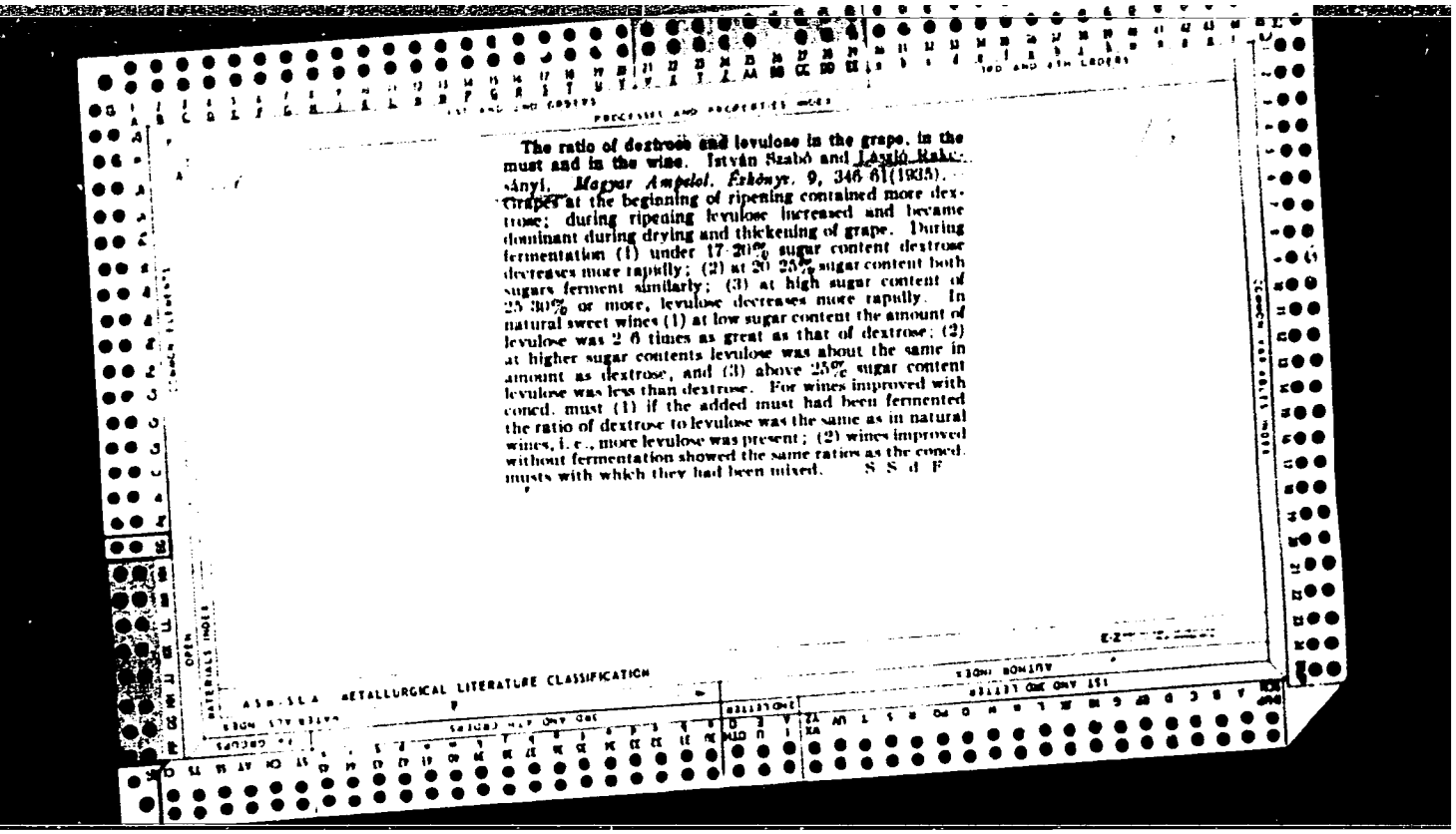
Experiments to conserve sweet wine and must. István Soós and László Rakcsányi. *Magyar Ampelol. Évkönyv.* 9, 202-70(1933).—A combination of SO_2 treatment and asbestos filtering conserved the products for 21 to 42 days. The best method consists of treating the wine or must with not too much SO_2 (300 mg.), then clarifying with $K_4Fe(CN)_6$ and tannic acid-gelatin, sedimentating, filtering through asbestos, and treating again with SO_2. The must treated thus remained unfermented for about 4 months.

S. S. de Finály



PROCESSES AND PROPERTIES INDEX

Diminishing the sulfur dioxide content of oversulfured wines and musts. László Rakcsányi. *Magyar Ampelol. Értesítő*, 9, 442-7(1935).—Attempts were made to remove excess SO_2 by (1) 30% H_2O_2, (2) perhydrol prepns. combined with urea, (3) hexamethylenetetramine and (4) 40% formaldehyde. (1) and (2) were effective and the sulfate originating from oxidized SO_2 did not rise above the 2 g. K_2SO_4 per l. permitted by the German wine law. (1) caused no detectable changes in the compn. of wine or must. The urea introduced by (2) is analytically determinable but is not objectionable. (3) diminished the amount of free SO_2 only and was also observable chemically in the treated products. (4) had similar effects on the free SO_2 only but its use is prohibited by the authorities. The expts. were made in lab. scales only. S. S. d. F.



The ratio of dextrose and levulose in the grape, in the must and in the wine. István Szabó and Lajos Rakonyi. *Magyar Ampelol. Evkönyv.* 9, 346-61(1935). Grapes at the beginning of ripening contained more dextrose; during ripening levulose increased and became dominant during drying and thickening of grape. During fermentation (1) under 17-20% sugar content dextrose decreases more rapidly; (2) at 20-25% sugar content both sugars ferment similarly; (3) at high sugar content of 25-30% or more, levulose decreases more rapidly. In natural sweet wines (1) at low sugar content the amount of levulose was 2-6 times as great as that of dextrose; (2) at higher sugar contents levulose was about the same in amount as dextrose, and (3) above 25% sugar content levulose was less than dextrose. For wines improved with concd. must (1) if the added must had been fermented the ratio of dextrose to levulose was the same as in natural wines, i. e., more levulose was present; (2) wines improved without fermentation showed the same ratios as the concd. musts with which they had been mixed. S S d F

M-8

Country : Hungary
CATEGORY :

ABS. JOUR. : [illegible]Biol., No. 19 1958, No. 87274

AUTHOR : [illegible]
INST. : —
TITLE : Preparation of Tanning Agent from Grape Seeds.

ORIG. PUB. : [illegible] 1956 (1957), 90, No 1, 129-142

ABSTRACT : Experiments conducted by technological group of the Scientific Research Institute of Viniculture (of Hungary) in 1951-1954, have shown that the tanning agent of grapes belongs to the group of condensed tanning agents. The most advantageous method of its recovery from grape seeds is a simultaneous extraction of both oil and tanning agent with a mixture of organic solvents consisting of 20% benzene and 80% alcohol. The oil is readily separated from the resulting extract. During the recovery a portion of the tanning agent is converted to the super-condensed [illegible] which is then reconverted to the tanning agent by means of a sulfite treatment. The oil thus obtained is of good quality, and the tanning agent is present in

CARD: 1/2

KIRKHENSHTEYN, A., akademik, Geroy Sotsialisticheskogo Truda; KAL'NIN'SH, A. [Kalniņš A.], akademik; STRADIN'SH, P. [Stradiņš, P.], akademik; SUDRABKALN, Yan [Sudrabkalnš, Jānis], narodnyy poet Latviyskoy SSR MELBARDIS, K., khudozhnik; LAPIN'SH, A. [Lapiņš, A.], narodnyy khudozhnik Latviyskoy SSR; YUROVSKIY, Yu., narodnyy artist SSSR; AVOTS, A., fotolyubitel'; VARDAUNIS, E., khudozhnik, zasluzhennyy deyatel' iskusstv Latviyskoy SSR; GAYLIS, V., kinooperator; RIDZENIYEKS, V., fotograf; KALNYN'SH, E. [Kalnins, E.]; LOGANSON, R. [Iohanson, R.], stareyshiy master khudozhestvennoy fotografii; RIEKSTS, Ya. [Rieksts, J.], fotograf; LERKH, Yu.; FEDOSEYEV, B., fotograf; REYKHMAN, E., zasluzhennyy deyatel' kul'tury Latviyskoy SSR; GROBMAN, Ya. [Grobman, J.], fotograf; OZOLS, Ya. [Ozols, J.], fotograf; TIKNUS, B., fotograf; FADEYEV, Ye., fotograf; RAKE, I., fotograf; BERZTIS, A., fotograf; RAKE, K., fotograf; UPIT, V., fotograf; SHADKHAN, M., fotolyubitel'; RITERS, G., fotolyubitel'.

Organize a society of Soviet photographers! Sov.foto 18 no.4:77 Ap '58. (MIRA 11:6)

1.Rizhskaya kinostudiya (for Gaylis, Fedoseyev).3.AN Latviyskoy SSR (for Ridzenieks). 4.Chlen-korrespondent Akademii khudozhestv SSSR (for Kal'nynsh, E). 5.Zhurnal "Rigas foto" (for Rieksts, Gorman, Ozols). 6.Latviyskoye teatral'noye obshchestvo (for Lerkh). 7.Direktor Doma narodnogo tvorchestva imeni E. Melngaylisa (for Reykhman). 8.Predsedatel' Tvorcheskogo soveta (for Grobman). 9.Chlen Tvorcheskogo soveta (for Ozols). 10.Gazeta "TSinya" (for Tiknus). 11.Fotokhronika Latviyskogo telegrafnogo agentstva (for Fadeyev). 12.Institut Latgiproprom (for Rake, I.).

(Photography--Societies)

KIRKHENSHTEYN, A., akademik, Geroy Sotsialisticheskogo Truda; KAL'NIN'SH, A. [Kalniņš A.], akademik; STRADIN'SH, P. [Stradiņš, P.], akademik; SUDRABKALN, Yan [Sudrabkalnȝ, Jānis], narodnyy poet Latviyskoy SSR MELBARDIS, K., khudozhnik; LAPIN'SH, A. [Lapiņš, A.], narodnyy khudozhnik Latviyskoy SSR; YUROVSKIY, Yu., narodnyy artist SSSR; AVOTS, A., fotolyubitel'; VARDAUNIS, E., khudozhnik, zasluzhennyy deyatel' iskusstv Latviyskoy SSR; GAYLIS, V., kinooperator; RIDZENIYEKS, V., fotograf; KALNYN'SH, E. [Kalnins, E.]; LOGANSON, R. [Iohanson, R.], stareyshiy master khudozhestvennoy fotografii; RIEKSTS, Ya. [Rieksts, J.], fotograf; LERKH, Yu.; FEDOSEYEV, B., fotograf; REYKHMAN, E., zasluzhennyy deyatel' kul'tury Latviyskoy SSR; GROBMAN, Ya. [Grobman, J.], fotograf; OZOLS, Ya. [Ozols, J.], fotograf; TIKNUS, B., fotograf; FADEYEV, Ye., fotograf; RAKE, I., fotograf; BERZTIS, A., fotograf; RAKE, K., fotograf; UPIT, V., fotograf; SHADKHAN, M., fotolyubitel'; RITERS, G., fotolyubitel'.

Organize a society of Soviet photographers! Sov.foto 18 no.4:77 Ap '58. (MIRA 11:6)

1.Rizhskaya kinostudiya (for Gaylis, Fedoseyev).3.AN Latviyskoy SSR (for Ridzenieks). 4.Chlen-korrespondent Akademii khudozhestv SSSR (for Kal'nynsh, E). 5.Zhurnal "Rigas foto" (for Rieksts, Gorman, Ozols). 6.Latviyskoye teatral'noye obshchestvo (for Lerkh). 7.Direktor Doma narodnogo tvorchestva imeni E. Melngaylisa (for Reykhman). 8.Predsedatel' Tvorcheskogo soveta (for Grobman). 9.Chlen Tvorcheskogo soveta (for Ozols). 10.Gazeta "TSinya" (for Tiknus). 11.Fotokhronika Latviyskogo telegrafnogo agentstva (for Fadeyev). 12.Institut Latgiproprom (for Rake, I.).

(Photography--Societies)

RAKELIC, Mladen, dipl. ek.

Replacing wooden boxes with the boxes of ondulated cardboard. Kem ind 10 no.2:C-22 F '61.

RAKETIN, V.

RAKETIN, V. Photographic copies of scales. p. 30. Vol. 5, no. 10, 1956
ELEKTROENERGIIA. Sofiia, Bulgaria

SOURCE: East European Accessions List (EEAL) Vol 6, No. 4--April 1957

RAKETOV, A.

RAKETOV, A.
An outline of the economic and financial condition of present-day Russia; official data. Revel', Varrak, 1921. 78 p.

Yudin HC335R34

RAKITOV, I.

Volgo-Azovskii, vodn[illegible] put'. [The Volga-Azov Waterway]. (Vlast' sovetov, 1927, no. 6, p. 21-2.). DLC: JN6501.A2

SO: SOVIET TRANSPORTATION AND COMMUNICATIONS, A BIBLIOGRAPHY, Library of Congress Reference Department, Washington, 1952, Unclassified.

S/137/61/000/012/076/149
A006/A101

AUTHORS: Privalov, I.I , Nagovitsyn, D.F., Lebedev, A.A., Rakevich, K.A., Kondrat'yev, S.N.

TITLE: The effect of the weight and reduction of an ingot on the number of macro-inclusions

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 12, 1961, 3-4, abstract 12D21 ("Byul. nauchno-tekhn. inform. Ural'skiy n.-i. in-t chern. metallov", 1960, no. 8, 22 - 32)

TEXT: Non-metallic inclusions in steel are composed of sulfides and oxysilicates (aluminum oxides Al_2O_3 and silicates SiO_2) which occur in the steel as macro-inclusions and impair its quality. Macro-inclusions are distributed over the height basically in a gradually decreasing amount from the bottom to the top section, where the number of macro-inclusions increases again. The depth of occurrence of the macro-inclusions in a 2.5 ton ingot is on the average 4.75-95.75 mm from the lateral surface, and 15.5 - 21.3 mm in a 3.5 ton ingot; it is 2 - 5.25 mm in blooms of 440 mm size, obtained from a 6.7 ton ingot. The displacement of inclusions for different cases of rolling is discussed. Thus, when

Card 1/2

S/137/61/000/012/076/149
A006/A101

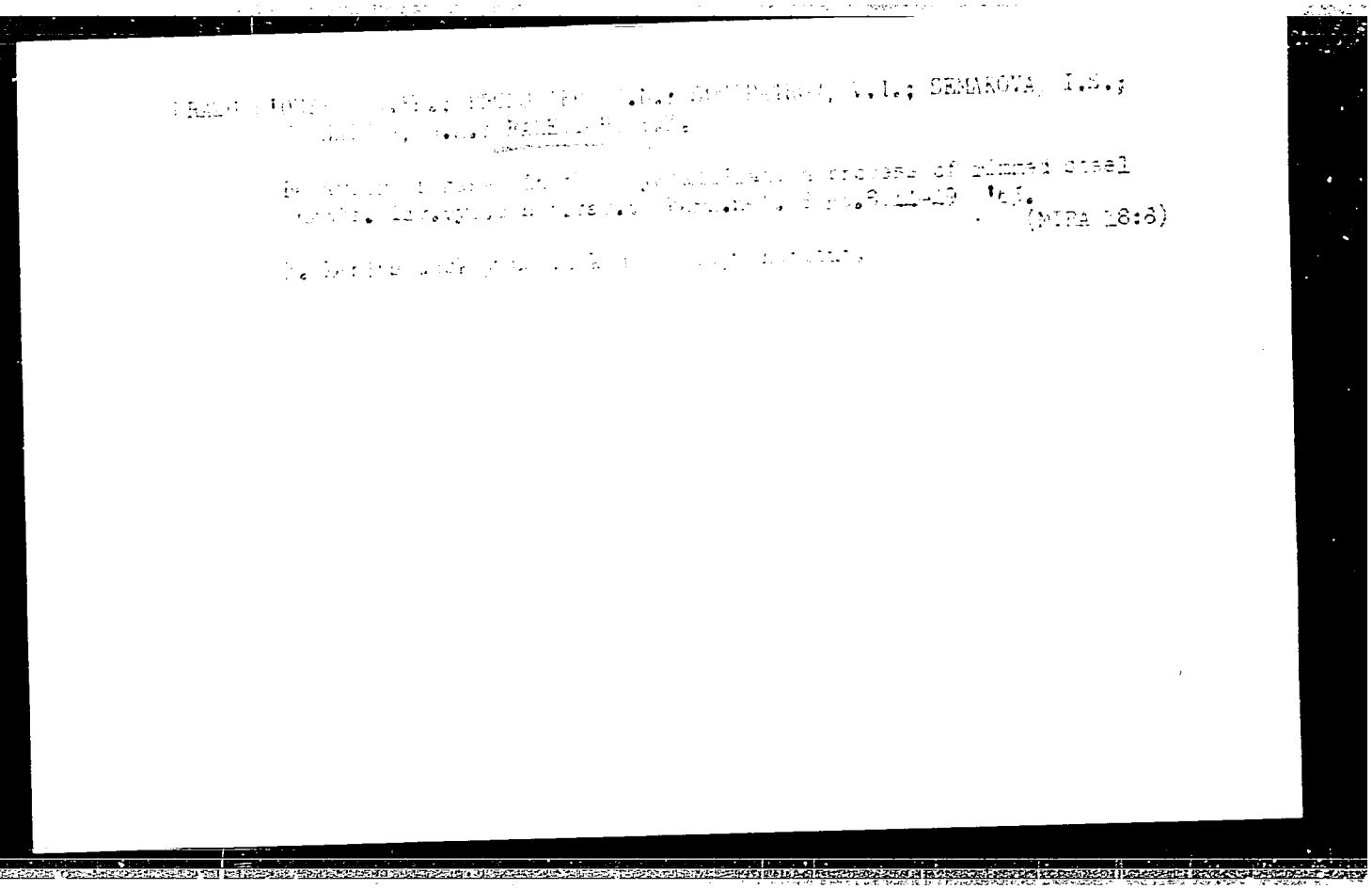
The effect of the weight and reduction ...

rolling the ingots on a blooming mill, the macro-inclusions are shifted towards the bloom surface. During the rolling of pipes, sheets and other articles directly from the ingot, macro-inclusions are shifted from the peripheral layers to those adjoining the butt surface. When rolling wheels directly from a 3.5 ton ingot, the macro-inclusions do not reach the peripheral layers during the shift. Tables and diagrams are given showing the occurrence depth of macro-inclusions in ingots of different weight.

I. Getiya

[Abstracter's note: Complete translation]

Card 2/2



SEMENOVA, I.S.;

(MIRA 18:8)

[illegible] [illegible], [illegible], [illegible], S.D.

Effect of the treatment of metals by [illegible] slag mixtures on the behavior of gases during the crystallization of ingots. Stal' [illegible] 166. (MIRA 18:8)

1. [illegible] politekhnicheskiy institut i Cherepovetskiy metallurgicheskiy zavod.

RAKEVICH, V.

Manually operated electric saws. Mast.uglia 5 no.1:20 Ja '56.
(MLRA 9:5)

1. Glavnyy mekhanik tresta Zabaykalugol'.
(Transbykalia--Coal mines and mining)(Saws)

RAKEVICH, V.

Performance results of the PK-2m cutter-loader in the Transbaikalia mines. Mast.ugl.4 no.7:26 Jl'55. (MLRA 8:10)

1. Glavnyy mekhanik tresta Zabaykalugol' kombinata Vostsibugol'.
(Transbaikalia--Coal mining machinery)

RAKEVICH, V.

Mobile telephone signaling. Mast. ugl. 4 no.2:23 F '55. (MLRA 8:6)

1. Glavnyy mekhanik tresta Zabaykalugol' kombinata Vostsibugol'
(Transbaikalia--Mine communication)

USSR / Human and Animal Morphology (Normal and Pathological). S
Circulatory System. Blood Vessels.

Abs Jour : Ref Zhur - Biologiya, No 1, 1959, No. 2947

Author : Rakeyeva, M. T.
Inst : Kazan Medical Institute
Title : Thin Vascularization of Sympathetic Trunk Ganglia and Paraganglia in Some Animals and Human Fetuses

Orig Pub : Sb. nauchn. rabot. Kazansk. med. in-t, 1957, vyp 4, 236-247

Abstract : The impregnation technique of Bil'shovskiy-Gros and others was used on 15 human embryos between 5-6 months of age, 30 cats, 30 dogs and 3 rabbits. It was demonstrated that at each ganglion (G) of the sympathetic trunk, there arrive 2 or 3 arteries from the surrounding tissues. These arteries form 2 distinct capillary networks: a dense, fine loop in the adipose tissue

Card 1/3

USSR / Human and Animal Morphology (Normal and Pathological). S
Circulatory System.

Abs Jour : Ref Zhur - Biologiya, No 1, 1959, No. 2947

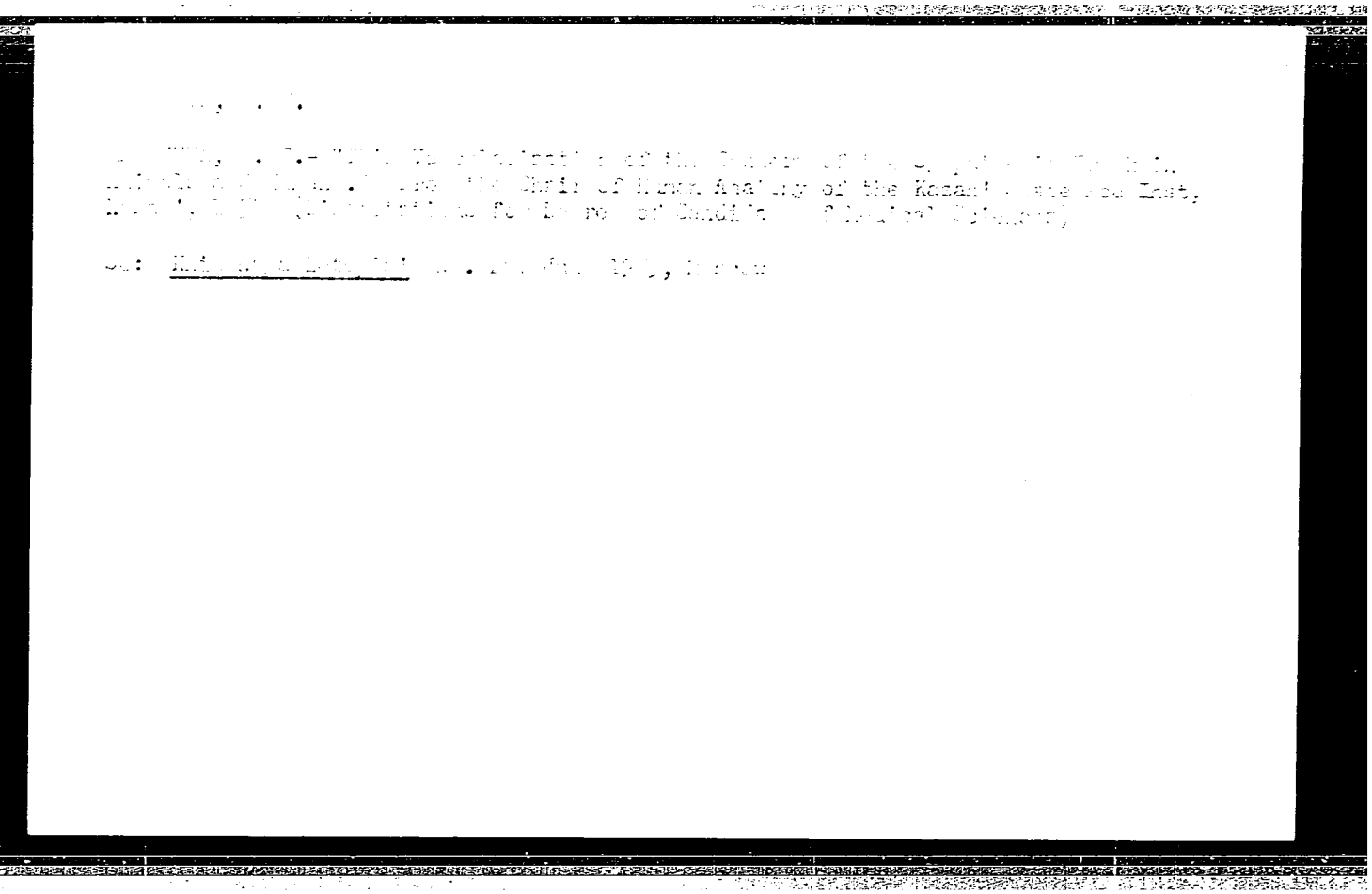
surrounding the G and a network in the substance of the G. The arteries and veins enter and leave the G in the same section of G. In human fetuses and newborn animals several dozens of nerve cells are arranged around a single capillary loop. In the superior cervical ganglion of adults the capillaries form loops around each nerve cell; in the stellate, thoracic, lumbar and sacral ganglia, 3-10 nerve cells are present within a single capillary loop. In the branches between the ganglia the vessels run parallel to the nerve fibers forming transverse anastomoses with the neighboring branches. In the superficial layers of the G substances, areas with a dense capillary network are observed which represent paraganglia included in the substance of G. The

Card 2/3

KAZEYEVA, N.T.

Fine vascularization of the spinal cord of a rabbit. Nauch. trudy Kaz. gos. med. inst. 14:269-270 '64. (MIRA 18:9)

1. Kafedra anatomii (zav. - prof. A.G.Korotkov) i tsentral'naya nauchno-issledovatel'skaya laboratoriya Kazanskogo meditsinskogo instituta.



107-58-3-23/41

AUTHOR: Bakh, G., Senior Instructor at the Karaganda Pedagogical Institute

TITLE: Radio Amateur Club at the Karaganda Pedagogical Institut (Samodeyatel'nyy radioklub v Karagandinskom pedinstitute)

PERIODICAL: Radio, 1958, Nr 3, pp 2 - 3 of centerfold (USSR)

ABSTRACT: The history and the activities of the radio amateur club at the Karaganda Pedagogical Institute are described. The club was founded in 1956 and had at that time 15 members. Now, there are 144 members in the different sections of the club, engaged in all kinds of amateur activities. There are 4 photos.

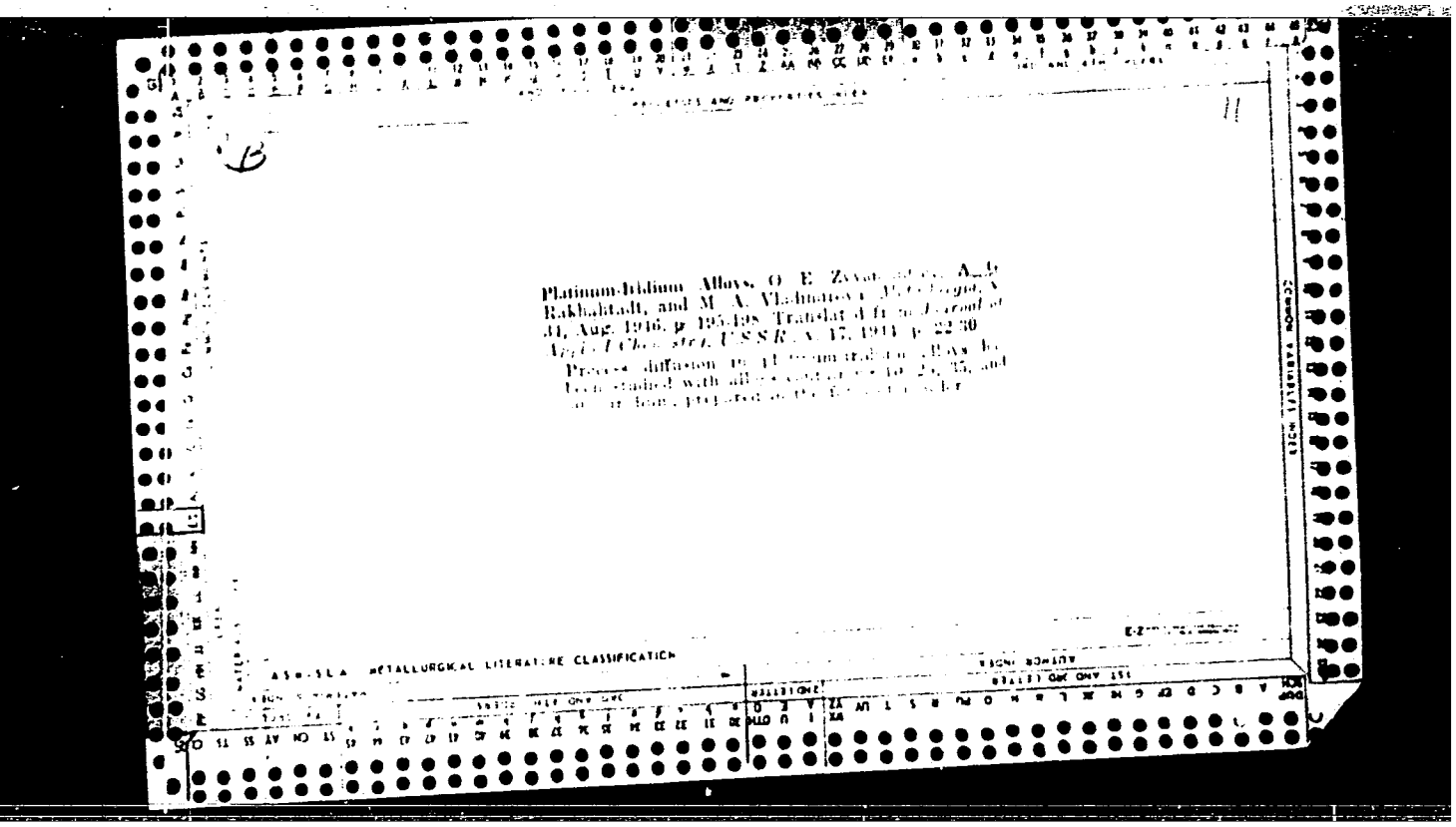
1. Radio clubs---Activities

Card 1/1

RAKH, G., starshiy prepodavatel'.

Amateur radio club at the Karaganda Pedagogical Institute. Radio no.3:32b-32c Mr '58. (MIRA 11:3)

1. Karagandinskiy pedinstitut.
(Karaganda--Radio clubs)



RAKHALSKAYA, E. M.

725. Trakhoma i bor'ba s ney. [Novosibirsk, 1954] 6c 20sm. 1000 ekz. B. tz. Bez. tit. i obl. [54-55401] p. 617.711-002.291

SO: Knizhnaya Letopis, Vol. 1, 1955

RAKHAL'SKAYA, Ye. M.

"Tenomyotomy as a Method for Surgical Correction of Acute Convergent Strabismus," Vest. Oftalmol., 28, No. 5, 1949. Mbr., Chair of Eye Diseases, Novosibirsk Inst., Advanced Training for Physicians, -c1949-.

RAKHAL'SKI. YA, Ye. M.

Response to Oronov's discussion on "Tenomyectomy as a surgical method in the treatment of extremely pronounced concomitant convergent strabismus". Vest. oft., Moskva 30 no. 4:17-19 July-Aug 1951. (CIML 21:3)

1. Assistant. 2. Of the Eye Clinic (Director -- Prof. O. I. Shershnevskaya), Novosibirsk Institute for the Advanced Training of Physicians.

USSR/Medicine - Encephalitis Sep/Oct 48
Medicine - Neurosis and Psychoneuroses

"Problem on the Treatment of Japanese Encephalitis (Psychosis in Subacute Stage)," Yu. Ye. Rakhal'skiy, Cand Med Sci, Psychiatric Clinic imeni S. S. Korsakov, First Moscow Ord of Lenin Med Inst, 4½ pp

"Nevropatol i Psikhiat" Vol XVII, No 5

In late 1945, author observed 12 cases of psychosis in subacute stage of Japanese encephalitis in Manchuria. Presents results of investigations, describing four cases in detail. Submitted 20 Jul 48.

[redacted] 23/49T83

RAKHAL'SKIY, Yu. Ye.

[Diagnosis of organic psychoses in adults] Diagnostika organicheskikh psikhozov v pozhilom vozraste. Kishinev, Gos. izd-vo Moldavii, 1957. 127 p. (MIRA 10:11)
(PSYCHOSES)

RAKHAL'SKIY, Yu.Ye.; IVANOVA, V.Ye.

Inductive-suggestive method for inducing vomiting in treating alcoholism. Vrach. delo no.3:299 Mr '57 (MLRA 10:5)

1. Kafedra psikhiatrii (zav.-prof. A.N. Molokhov) Kishinevskogo meditsinskogo instituta.
(VOMITING) (ALCOHOLISM--TREATMENT)

RAKHAL'SKIY, Yu.Ye.

Peculiar psychotic conditions in alcoholic intoxications [with summary in French]. Zhur.nevr. i psikh. 57 no.10:1229-1234 '57. (MIRA 10:12)

1. Kafedra psikhiatrii Kishinevskogo meditsinskogo instituta (zav. - prof. A.N.Molokhov)
(PSYCHOSES, ALCOHOLIC, case reports, unusual cases (Rus))

RAKHAL'SKIY, Yu.Ye., dotsent

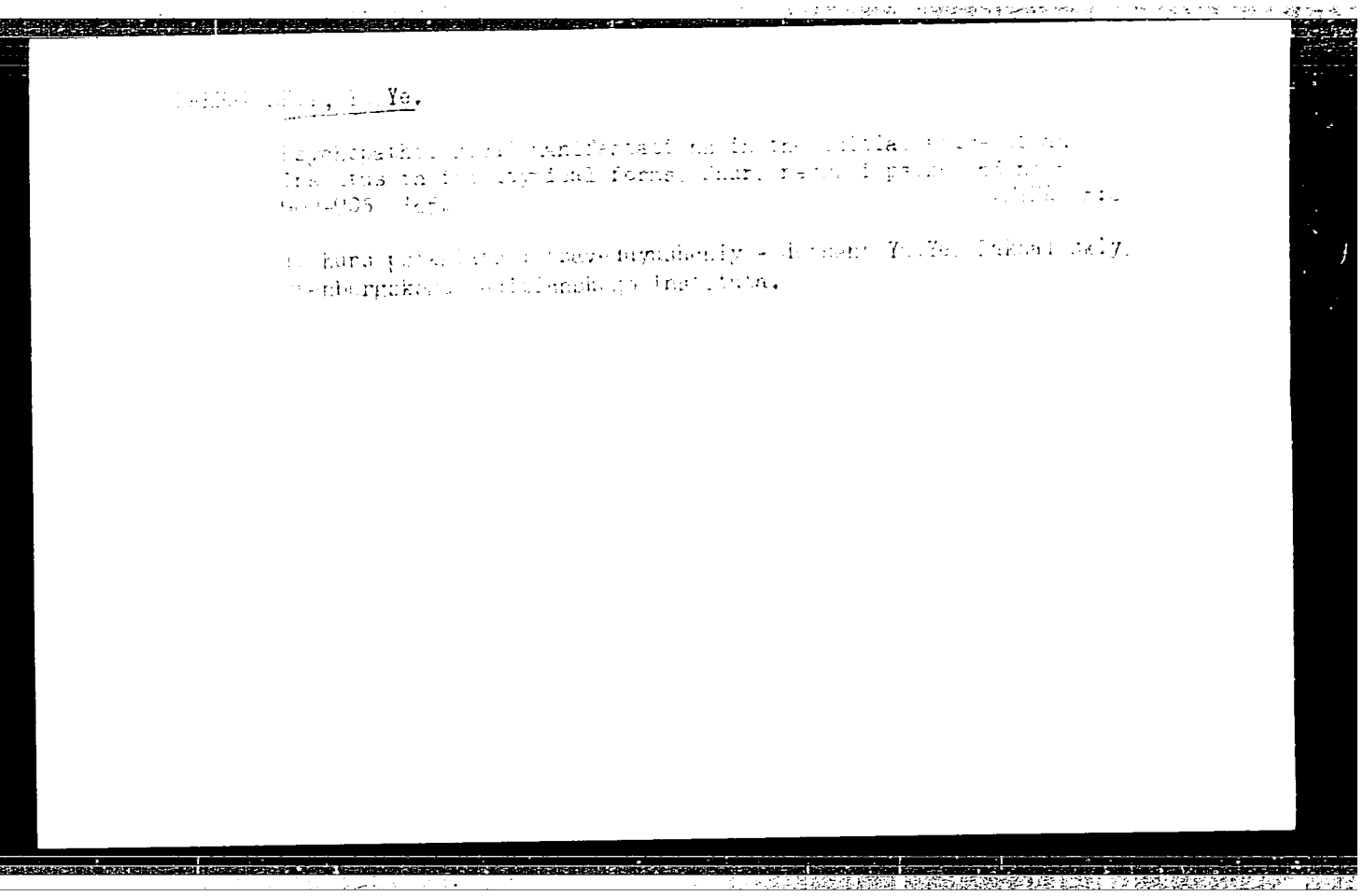
Maniacal states in hypertension and atherosclerosis of the vessels of the brain. Trudy Gos.nauch-issl.inst.psikh. 25: 87-95 '61. (MIRA 15:12)

1. Kafedra psikhiatrii Kishinevskogo gosudarstvennogo meditsinskogo instituta (zav. kafedroy - prof. A.N.Molokhov), kafedra psikhiatrii Orenburgskogo gosudarstvennogo meditsinskogo instituta (zav. kafedroy-dotsent Yu.Ye.Rakhal'skiy) i klinika sosudistykh psikhozov (zav. - prof. V.M.Banshchikov) Gosudarstvennogo nauchno-issledovatel'skogo instituta psikhiatrii Ministerstva zdravookhraneniya RSFSR.
(HYPERTENSION) (CEREBRAL ARTERIOSCLEROSIS) (PSYCHOSES)

RAKHAL'SKIY, Yu.Ye., dotsent

Clinical statisical analysis of autopsy material in cerebral arteriosclerosis with mental disorders. Trudy Gos.nauch-issl. inst.psikh. 25:315-326 '61. (MIRA 15:12)

1. Kafedra psikhiatrii Orenburgskogo gosudarstvennogo meditsinskogo instituta (zav. kafedroy - dotsent Yu.Ye.Rakhal'skiy) i klinika sosudistykh psikhozov (zav. - prof. V.M.Banshchikov) Gosudarstvennogo nauchno-issledovatel'skogo instituta psikhiatrii Ministerstva zdravookhraneniya RSFSR.
(CEREBRAL ARTERIOSCLEROSIS) (MENTAL ILLNESS)



RAKHAL'SKIY, Yu.Ye.,dotsent; KAZAKOVA, P.B., kand.med. nauk

Diffuse changes in the brain in atherosclerosis with mental disorders; clinical morphological investigation. Trudy 1-go MMI 21: 453-470'63. (MIRA 16:9)

1. Kafedra psikhiatrii (zav. - dotsent Yu.Ye. Rakhal'skiy) Orenburgskogo meditsinskogo instituta, Institut psikhiatrii Ministerstva zdravookhraneniya RSFSR (dir. - prof. D.D.Fedotov) i kafedra psikhiatrii (zav. - prof. V.M. Banshchikov) 1-go Moskovskogo ordena Lenina meditsinskogo intituta imeni I.M.Sechenova.
(CEREBRAL ARTERIOSCLEROSIS) (PSYCHOSES)

RAKHAL'SKIY, Yu.Ye., dotsent

Mechanisms of the course of atherosclerotic disorders of the psyche. Trudy 1-go MMI 21:67-75'63. (MIRA 16:9)

1. Kafedra psikhiatrii (zav.-dotsent Yu.Ye. Rakhal'skiy) Orenburgskogo meditsinskogo instituta i kafedra psichiatrii (zav. - prof.V.M.Banshchikov) 1-go Moskovskogo ordena Lenina meditsinskogo instituta imeni I.M.Sechenova.
(CEREBRAL ARTERIOSCLEROSIS)
(PSYCHOSES)

RAKHAL'SKIY, Yu.Ye., dotsent

Atherosclerotic dementia. Trudy 1-go MMI 21:95-108'63. (MIRA 16:9)

1. Kafedra psikhiatrii (zav. - dotsent Yu.Ye.Rakhal'skiy) Orenburgskogo meditsinskogo instituta i kafedra psikhiatrii (zav. prof. V.M.Banshchikov) 1-go Moskovskogo ordena Lenina meditsinskogo instituta imeni I.M.Sechenova.
(CEREBRAL ARTERIOSCLEROSIS) (DEMENTIA)

RAKHAL'SKIY, Yu.Ye., dotsent

Mechanisms of the course of atherosclerotic disorders of the psyche. Trudy 1-go MMI 21:67-75'63. (MIRA 16:9)

1. Kafedra psikhiatrii (zav.-dotsent Yu.Ye. Rakhal'skiy) Orenburgskogo meditsinskogo instituta i kafedra psichiatrii (zav. - prof.V.M.Banshchikov) 1-go Moskovskogo ordena Lenina meditsinskogo instituta imeni I.M.Sechenova.
(CEREBRAL ARTERIOSCLEROSIS)
(PSYCHOSES)

RAKHAL'SKIY, Yu.Ye., dotsent

Atherosclerotic cerebrasthenia. Trudy 1-go MMI 21:85-94'63.
(MIRA 16:9)

1. Kafedra psikhiatrii (zav. - dotsent Yu.Ye. Rakhal'skiy) Orenburgskogo meditsinskogo instituta i kafedra psikhiatrii (zav. - prof. V.M. Banshchikov) 1-go Moskovskogo ordena Lenina meditsinskogo instituta imeni I.M.Sechenova.
(CEREBRAL ARTERIOSCLEROSIS)

RAKHAL'SKIY, Yu.Ye., MINSBERG, V.M.

Alcoholism and hypertension. Vrach.delo no.9:939-941 S'58
(MIRA 11:10)

1. Kafedra psikhiatrii (zav. - prof. A.N. Molokhov) Kishinevskogo meditsinskogo instituta.
(ALCOHOLISM)
(HYPERTENSION)

MOLOKHOV, Aleksey Nikolayevich; RAKHAL'SKIY, Yuliy Yegadovich; GOTOVTSEV, P.I., red.; GABERLAND, M.I., tekhn.red.

[Chronic alcoholism] Khronicheskii alkogolizm. Moskva, Gos. izd-vo med.lit-ry Medgiz, 1959. 148 p. (MIRA 13:7)
(ALCOHOLISM)

AUTHOR: Gulyayev, B.B. SOV/24-58-4-37/39

TITLE: Conference on Crystallisation of Metals (Soveshchaniye po kristallizatsii metallov)

PERIODICAL: Izvestiya Akademii Nauk SSSR, Otdeleniye Tekhnicheskikh Nauk, 1958, Nr 4, pp 153 - 155 (USSR)

ABSTRACT: This conference was held at the Institut mashinovedeniya AN SSSR (Institute of Mechanical Engineering of the Ac.Sc. USSR) on June 28-31, 1958. About 400 people participated and the participants included specialists in the fields of foundry, metallurgy, crystallography, physics, welding, heat, physical chemistry, mathematical physics and other related subjects. In addition to Soviet participants, foreign visitors included Professor D. Cikl (East Germany) and M.I. Chvorinov (Czechoslovakia). This conference on crystallisation of metals was the fourth conference relating to the general problem of the theory of foundry processes.

Conference on Crystallisation of Metals SOV/24-58-4-37/39

General Problems of Crystallisation of Metals

Member of the Ac.Sc. Belorussian SSR N.N. Sirota, in his paper "On the Mechanism of the Process of Crystallisation", proposed a general physico-mathematical theory on germination and the growth of crystals and described its application to problems of crystallisation of metals.

Corresponding Member of the Ac.Sc. Ukrainian SSR K.P. Bugin and Yu.N. Taran, in their paper "Eutectic Crystallisation of Grey Iron", considered the features of formation of graphite separations in eutectic alloys from the point of view of the general theory of crystallisation of Iron. B.Ya. Lyubov, in his paper "Calculation of the Speed of Solidification of Metals in Large Volumes", proposed a synthesis of the molecular-kinetic and of the thermal theories of crystallisation of metallic castings.

A.G. Spasskiy, in the paper "Fundamental Factors Influencing the Structure of Castings" and M.V. Maltsev in the paper "Methods of Improving the Quality of Cast Metal", described results of their investigations of crystallisation of castings from various alloys and considered methods of controlling such processes.

I.I. Firkin dealt with the influence of fluctuations in model and formation of crystals in complex alloys

G.P. Ivantsov gave a review of the present concepts on germination and the growth of crystals. O.N. Mashitskiy, A.A. Denisova and B.B. Gulyayev considered the influence of the speed of crystallisation and the composition of the alloys on the quantitative characteristics of the structure and the mechanical properties of castings of the system iron-carbon and aluminium-silicon. D.S. Kasenetskaya, E.F. Bakhmanova and Ye.Z. Spektor dealt with the results of investigation of the kinetics of crystallisation of iron and its alloys. G.F. Balandin proposed a mathematical theory of formation of the structure of castings and applied it for elucidating the features of crystallisation of iron. Ya.V. Grechnyy dealt with the features of crystallisation of binary alloys of various types.

Card4/10

RAKHMANOVICH, A. N.

3
1-4E44

176. Rakhmanovich, A. N., Flow of a viscous gas in a subsonic jet (in Russian), *Trudi Ufimsk. aviats. in-ta* no. 1, 3–16, 1955; *Ref. Zh. Mekh.* 1956, Rev. 5109.

Examination of the flow of a viscous gas in a subsonic jet in the one-dimensional statement of the problem. The influence of the viscosity is estimated by the polytropic exponent and the efficiency of the equivalent process of expansion.

Author also investigates the flow parameters in a jet in relationship to the coefficient of loss of velocity, which is identically connected with the exponent of polytropy and the efficiency of the equivalent process of expansion. The graphs of these relationships are given for a gas with the adiabatic exponent $K = 1.33$. Some remarks are made on the rate of propagation of sound in a viscous gas.

D. A. Mel'nikov, USSR

Courtesy Referativnyi Zhurnal
Translation, courtesy Ministry of Supply, England

1/1 JRH

GERSHGORN, M.A.; SVIRIDENKO, F.F.; KAZARNOVSKIY, I.S.; [illegible]; POPOVA, A.N.; FRADINA, M.G.; Prinimali uchastiye: [illegible]; PUGOL'SKIY, N.L.; SIEPKANEV, N.F.; [illegible]; Ya.S.; BUL'SKIY, M.T. [deceased]; ARKHANGEL'SKIY, P.L.; [illegible], B.A.; VISTOROVSKIY, N.T.; PAKHANSKIY, B.I.; SAPOZHNIKOV, V.Ye.; PYABININ, N.G.; KAPAKULINA, M.R.; FADEYEVA, A.M.; [illegible], L.A.

Improving the production of high-strength rails by alloying them with granulated ferrochromium in the ladle. Stal' 25 no.5:408-411 My '65. (MIRA 18.6)

1. Ukrainskiy nauchno-issledovatel'skiy institut metallov i zavod "Azovstal'".

PROTASOV, N.F., inzh.; SHUVALOV, B.I., inzh.; FRADINA, M.G., inzh.; CHERNOVA, A.V., inzh.; RAKHANSKIY, B.I., inzh.

Properties and pecularities in the production of type R-75 heavy rails. Stal' 23 no.8:731-733 Ag '63. (MIRA 16:9)
(Railroads--Rails) (Rolling (Metalwork))

LARIONOV, L.F., BOGOMAZ, L.A., DMITRIYEVA, Ye.V. IZVOLININA, Ye.I.
RAKHAYEVA, O.I., TROYANOVSKIY, D.L. (Leningrad)

Sarcolysin therapy in multiple myeloma. Vrach.delo no.8:857-858
Ag '58 (MIRA 11:8)

1. Bol'nitsa imeni Sverdlova.
(MARROW--TUMORS)
(CYTOTOXIC DRUGS)

18(6) PHASE I BOOK EXPLOITATION SOV/1734

Vsesoyuznoye soveshchaniye spektroskopistov-analitikov tsvetnoy metallurgii. 2d, Moscow, 1955

Materialy... (Papers Read at the Second All-Union Conference of Analytical Spectroscopists in Nonferrous Metallurgy) Moscow, Nauchno-tekhn. Ob-vo tsvetnoy metallurgii, 1957. 128 p. 1,000 copies printed.

Sponsoring Agency: Nauchno-tekhnicheskoye obshchestvo tsvetnoy metallurgii.

Editorial Board: M.E. Britske, A.K. Rusanov, N.I. Matveyev, V.V. Polyakova, L.N. Filimonov; Tech. Ed.: N.S. Trusov.

PURPOSE: This book is intended for analytical chemists in the field of nonferrous metallurgy.

COVERAGE: This is a collection of papers dealing with the use of the spectroscopic method as practiced in the USSR for the quantitative determination of various elements in the field of nonferrous metallurgy. Experience gained at several important Soviet metallurgical plants is described. In addition to practical application of the method, a number of papers deal with problems in the production of standard samples. For a brief account of the state of affairs as of 1955 in this field in the USSR, see Table of Contents, first article. There are a few scattered references, both Soviet and non-Soviet.

RAKHAYLOVA, M.S.; TIKHONOVA, Ye.P.

Intermediate hypophyseal forms of obesity of rheumatic etiology.
Trudy Ukr. nauch.-issl. inst. eksper. endok. 19:386-392 '64.
(MIRA 18:7)

1. Iz klinicheskogo otdela Ukrainskogo instituta eksperimental'noy endokrinologii.

RAKHAYLOVA, M. S., Cand of Med Sci -- (diss) "Clinical Characteristics and Certain Morphological Peculiarities of Hemoraghic Meningo-encephalitis," Khar'kov, 1959, 12 pp (Khar'kov Medical Institute)
(KL, 1-60, 126)

LESHCHENKO, A.G.; TIKHONOVA, Ye.P.; RAKHAYLOVA, [illegible].S.

Neurological characteristics of infectious encephalitis marked by a syndrome of thyrotoxicosis. Sbor. nauch. trud. Ukr. nauch.- issl. inst. eksper. endok. 15:260-266 '59. (MIRA 14:11)
(ENCEPHALITIS) (THYROID GLAND--DISEASES)

[redacted], A. K.

Geometricheskiye Idei Leontiya Magnitskogo. Perm, Uchen, Zap, Ped. In-ta, 3 (1938) 19-37.

SO: Mathematics in the USSR, 1917-1947
edited by Kurosh, A. G.,
Markushevich, A. I.,
Rashevskiy, P. K.
Moscow - Leningrad, 1948

RAKHILIN, V.K.

Using dyes in studying the biology of birds. Biul.MOIP.Otd.biol. 62 no.1:111-112 Ja-F '57. (MLRA 10:6)
(ORNITHOLOGY) (DYES AND DYEING)

RAKHILIN, V., starshiy nauchnyy sotrudnik; VOROB'YEV, K.A., doktor biol. nauk.

Nature preserves. IUn. nat. no.11:29-31 N '58. (MIRA 11:12)

1.Sikhote-Alin'skiy zapovednik "Abrek," Ussuriyskiy kray.
(Sikhote-Alin' preserve)

RAKHILIN, V., starshiy nauchnyy sotrudnik

Useful book on pigeons ("Pigeons"; collection of articles. Reviewed by V.Rakhilin). Ptitsevodstvo 9 no.7:39-40 Jl '59.
(MIRA 12:10)

1. Sikhote-Alin'skiy goszapovednik.
(Pigeons)

RAKHILIN, V.K.

Studying the biology of birds of individual marking. Migr. zhiv. no. 2:185-197 '60. (MIRA 13:12)

1. Sikhote-Alinskiy gosudarstvennyy zapovednik.
(Birdbanding)

VYSOTSKIY, B.V.; RAKHILIN, V.K.

Results of examining certain fresh-water birds and animals for leptospirosis. Zhur.mikrobiol.epid.i immun. 31 no.9:42-44 S '60.
(MIRA 13:11)

1. Iz Vladivostokskogo instituta epidemiologii, mikrobiologii i gigiyeny i Sikhote-Alinskogo zapovednika.
(LEPTOSPIROSIS)

RAKHILIN, V.K.

Bird fauna of the eastern slopes of the Sikhote-Alin'. Biul. MOIP. Otd. biol. 65 no. 4:41-45 Jl-Ag '60. (MIRA 13:10)
(SIKHOTE-ALIN' RANGE--BIRDS)

RAKHILIN, V.K.

Migration of house mice. Priroda 50 no.5:116 My '61. (MIRA 14:5)

1. Sikhote-Alinskiy Goszapovednik (pos.Terney, Primorskiy kray).
(Mice)

[illegible], V.[illegible].

Joint nesting of the starling Sturnia sturnina Pall. and the tree sparrow. Ornitologiia no.6:481 '63.
(MIRA 17:5)

VYSOTSKIY, B.V.; MALYKH, F.S.; MEDRAYA, L.A.; SIONOV, M.N., RAKHILIN, V.K.

Results of a survey on leptospirosis in warm-blooded animals in the mountain regions of the Maritime Territory. Trudy VladIEMG no.2:59-60 '62. (MIRA 18:3)

1. Iz Vladivostokskogo nauchno-issledovatel'skogo instituta epidemiologii, mikrobiologii i gigiyeny i Sikhote-Alinskogo zapovednika.

RAKHILIN, V.K.

Distribution of some mammals in the Maritime Territory.
Zool.zhur. 44 no.8:1274-1275 '65.
(MIRA 18:11)

1. Vserossiyskoye obshchestvo okhrany prirody, Moskva.

RAKHILIN, V.V.

Interesting ornithological finds in the Far East. Sbor. trud. Zool. muz. MGU. 9:214-216 '65. (MIRA 18:6)

DADASHEV, A.G.; RAKHIL'KINA, A.M.

Effect of dihydroergotamine on the interoceptive metabolic reflexes under normal temperature and in hypothermia. Dokl. AN Azerb. SSR 21 no.7:72-75 '65.

(MIRA 18:12)

1. Sektor fiziologii AN AzSSR.

R[illegible], I[illegible] V[illegible], ed.

Tadzhiksko-russkiy slovar' (Tadzhik-Russian Dictionary)
Pod red. M. V. Rakhima i L. V. Uspenskaya. Moskva, GIINS, 1954.

789 p.

At head of title: Akademiya Nauk Tadzhikskoy Stalinabad. Institut Yazyka i Literatury.

RAKHIMBAYEV, Kh.Kh.

Treatment of lobar pneumonia with rectal 2% sulfidine solution. Klin. med., Moskva 29 no.12:81 Dec 51. (CLML 21:4)

1. Of Aksuyskiy Rayon Hospital (Head Physician--Kh.Kh. Rakhimbayev), Taldy-Kurgan Oblast.

RAKHIMBAEV, Abdula Rakhimb

RAKHIMBAEV, Abdula Rakhimb. ...Tadzhikistan. Moskva, Gos. sots.-ekon. izd-vo, 1936. 118, (1) p.

DLC: DK861.T3R3

NNC

SO: LC, Soviet Geography, Part II, 1951, Unclassified

AZIMOV, S.A.; GULYAMOV, U.G.; RAKHIMBAYEV, B.; USMANOVA, M.

Instances of hyperfragments with meson disintegration. Dokl. AN Uz. SSR no.9:13-18 '57. (MIRA 11:5)

1.Fiziko-tekhnicheskiy institut AN UzSSR. Predstavleno akademikom AN UzSSR U.A. Arifovym.
(Nuclear reactions) (Mesons--Decay)

BANNIK, B.P.; GULYAMOV, U.G.; KOPYLOVA, D.K.; NOMOFILOV, A.A.; PODGORETSKIY, M.I.; RAKHIMBAYEV, B.G.; USMANOVA, M.

Hyperfragments in nuclear emulsions. Zhur.eksp. i teor. fiz. 34 no.2:286-297 F '58. (MIRA 11:4)

1. Ob"yedinennyy institut yadernykh issledovaniy i Tashkentskiy fiziko-tekhnicheskiy institut.
(Mesons) (Cosmic rays)

RAKHIMBAYEV, B.

CONCERNING ABNORMAL CASES OF HYPERFRAGMENT DECAY

S. A. Azimov, U. Gulyamov, M. Podgoretsky, B. Rakhimbayev

Results of the investigation of hyperfragments using thick photoemulsions are presented. From a total of 60,000 observed stars containing move than 7-8 black and grey spurs, 9 cases of hyperfragment decay were detected. In two of these cases, abnormal decays with an ejection of a K-meson were observed.

If the K-meson is regarded as a decay product of a heavier hyperon than Ξ (distinct from the cascade hyperon, since it does not produce K-meson during decay), then it follows from the obtained decay schemes that the mass of these particles should be $\sim 3,0$ m_e.

Report presented at the International Cosmic Ray Conference, Moscow, 6-11 July 1959.

APPROVED FOR RELEASE: 03/20/2001 CIA-RDP86-00513R001344020018-8"

AZIMOV, S.A.; GULYAMOV, U.G.; RAKHIMBAYEV, B.G.

Two cases of the meson decay of hyperfragments. Dokl. AN Uz. SSR no.7:6-9 '59. (MIRA 12:10)

1.Fiziko-tekhnicheskiy institut AN UzSSR. Predstavleno akad. AN UzSSR S.V. Starodubtsevym.
(Mesons--Decay)

82407

S/056/60/038/03/05/033
BC06/B014

24.6810

AUTHORS: Azimov, S. A., Gulyamov, U. G., Karimova, R., Rakhimbayev, B. G.

TITLE: Anomalous Decays of Hyperfragments //

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, 1960, Vol. 38, No. 3, pp. 697-702

TEXT: In recent years particles have been detected in the decay of hyperfragments the masses of which corresponded to the K-meson mass within the limits of error. The authors subjected one emulsion chamber to cosmic radiation in the stratosphere, while another was bombarded with $4.5 \cdot 10^9$-ev pions; three such decay events were recorded, one of them already described in Ref. 4 and the others in the article under review. The two cases under consideration were found in the pion-bombarded chamber which contained emulsions of the type Ilford G-5. Altogether, 60,000 stars with $N_h \geq 8$ were recorded. Case 1: Fig. 1 shows a microphotograph. The primary star was of the type 18 + 2γ, the particle F departing from it (path length of 101μ)

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Anomalous Decays of Hyperfragments

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decayed into two particles the charges of which were (8 ± 2) e. The ranges of these particles (1 and 2) were $(61 \pm 0.4)\mu$ and $(9362 \pm 122)\mu$, the angle between them was $83^{\circ}50' \pm 1^{\circ}20'$. Track 1 was attributed to an α-particle, and the mass of particle 2 was investigated by using two methods, i.e., the range-scattering method and the range-ionization method. The masses found by these methods were the following: $(856 \pm 167)m_e$ and $(990 \pm 120)\ m_e$. Assuming that particle 2 be a K-meson it would have an energy of (38.3 ± 0.3) Mev and a momentum of (197.6 ± 1.4)Mev/c. The decay modes of the F-particle are considered to be the most likely ones:
$C_6^{14} \rightarrow He_2^3 + K^- + n + B_5^{10}$ and $O_8^{18} \rightarrow He_2^3 + K^- + n + N_7^{14}$. Case 2: The primary star was of the type $19 + 3\pi$; a particle F departed from it which, after having attained 28μ, decayed into the charged particles 1 and 2. The F-track has two breaks; the tracks 1 and 2 had a range of $(465 \pm 8)\mu$ and $(13640 \pm 170)\mu$, the angle between them was $141^{\circ} \pm 1^{\circ}30'$. The mass of particle 2 was determined by 4 different methods, and the following masses were obtained: $(801 \pm 143)m_e$ by grain counting, $(1170 \pm 120)m_e$ from the density of breaks, $(986 \pm 132)m_e$ - by the method of constant deviations, and $(764 \pm 170)m_e$ - by

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Anomalous Decays of Hyperfragments

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the method of the "constant cell". The following decay mode is considered probable: $H^4_1 \rightarrow He^3_2 + K^- + n + Q$. The individual methods are discussed. In order to find out whether the deviations of the measured mass values of the proton mass (in measurements by the range-scattering and the range-ionization methods) are interrelated, the mass distributions were studied. Fig. 3 shows the particle mass distribution measured by the $[\langle\alpha\rangle, R]$ method for particles whose masses are larger than the proton mass, as determined by the $[\beta, R]$ method; Fig. 4 represents the distribution for particles whose masses are smaller than the proton mass. Agreement is adequate to permit the assumption that there is no correlation between the deviations of multiple scattering and ionization. The probability that the proton mass and the K-meson mass coincide by chance is lower than 0.5% with an error of 400 m_e. Data obtained by the above authors is compared in a table with that published in Refs. 1-5. Finally, the authors thank M. I. Podgoretskiy for his interest and advice. There are 4 figures, 1 table, and 11 references, 4 of which are Soviet.

ASSOCIATION: Fiziko-tekhnicheskiy institut Akademii nauk Uzbekskoy SSR (Institute of Physics and Technology of the Academy of Sciences, Uzbekskaya SSR)

SUBMITTED: August 24, 1959

Card 3/3

AZIMOV, S.A.; GULYAMOV, U.G.; RAKHIMBAYEV, B.G.

Bonding energy of Λ^0-particles in hyperfragments. Izv. AN Uz. SSR. Ser. fiz.-mat. nauk no.4:70-77 '61. (MIRA 14:9)

1. Fiziko-tekhnicheskiy institut AN UzSSR. Chlen-korrespondent AN UzSSR (for Azimov).

(Hyperfragments)

L 23737-66 EWT(m)/T

ACC NR: AP6014820 SOURCE CODE: UR/0367/65/001/004/0676/0680

AUTHOR: Azimov, S. A.; Bannik, B. P.; Vishki, T.; Seb, Do In; Gulyamov, U. G.; Rakhimbayev, B. G.; Chernova, L. I.

ORG: [Azimov, Gulyamov, Rakhimbayev, Chernova] Institute of Nuclear Physics, AN UzbSSR (Institut yadernoy fiziki AN UzbSSR); Joint Institute of Nuclear Research (Ob"yedinennyy institut yadernykh issledovaniy)

TITLE: Inelastic pp-interactions with low momentum transfer

SOURCE: Yadernaya fizika, v. 1, no. 4, 1965, 676-680

TOPIC TAGS: inelastic interaction, nuclear emulsion, proton, isobar

ABSTRACT: The nuclear emulsion method is used to study inelastic pp--interactions for energies of 2.26 and 9 GEV of a primary proton. The search for events in the emulsion was performed by accelerated inspection of traces. Energy distributions were obtained for slow protons. The events selected are of two types: pp-interactions and a small number of interactions connected with secondary processes in the nucleus. For the energy distribution all cases were taken with their weights K = 1/W, where W is the probability of registration. Both distributions were normalized for the complete observed path of primary protons R = 3694m. In the processing of the experimental data the relative output of the reaction was evaluated qualitatively with the formation of one or two isobars. The authors thank Van Shu-fen', T. Vishki, I. M. Gramenitskiy, V. G. Grishin, N. Dalkhazbav, R. M., Lebedev, A. A. Nomofilov, M. I. Podgoretskiy,

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V. N. Strel'tsov for providing us the materials, which were so useful in this work. The authors also thank I. M. Gramenitskiy for his interest and assistance in the work; M. I. Podgoretskiy for the discussions; and E. G. Bubelev, A. Yuldashev, V. N. Strel'tsov, Yu. A. Troyan and V. G. Grishin for participating in the discussions and for their remarks. The authors offer further thanks to the laboratory workers of IYaF, AN UzbSSR and LVE OIYaI for carrying-out the review of photoemulsions and measurements; and A. T. Balandikov for help in carrying-out the calculations. Orig. art. has: 4 figures. [JPRS]

SUB CODE: 20 / SUBM DATE: 01Jul64 / ORIG REF: 006 / OTH REF: 001

L 07078-67 EWT(m)
ACC NR: AP7002337 SOURCE CODE: UR/0166/66/000/003/0054/0057

AUTHOR: Azimov, S. A.; Gulyamov, U. G.; Rakhimbayev, B. G.; Chernova, L. I.

ORG: Institute of Nuclear Physics, Academy of Sciences Uzbek SSR (Institut yadernoy fiziki AN UzSSR)

TITLE: Inelastic p-p interactions at an energy of 2.26 gev

SOURCE: AN UZSSR. Izvestiya, Seriya fiziko-matematicheskikh nauk, no. 3, 1966, 54-57

TOPIC TAGS: inelastic interaction, meson interaction, nucleon interaction

ABSTRACT: There has recently been developed a model for the single-meson interaction of particles at high energies. It is of great interest to verify the single-meson collison scheme and to compare model predictions with experimental data. This necessitates careful investigations into the dependence of the inelastic nucleon-nucleon interaction σ^{inel}_{NN} on the square of the four-dimensional recoil momentum Δ^2 for several fixed values of the kinetic energy of the primary proton, as well as ascertaining the course of the energy dependence of σ^{inel}_{NN} with a "cut-off" for the quantity Δ^2.

The present article sets forth the results of a study of these questions for a primary proton energy of 2.26 Gev. Used for the investigations was an

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L 09068-67
ACC NR: AP7002337

emulsion cloud chamber irradiated by 2.26 Gev protons on a synchrophasotron of OIYaI [Ob"yedinennyy institut yadernykh issledovaniy; Joint Institute for Nuclear Research). The chamber consisted of 236 "R" type emulsion sheets of NIKFI [Nauchno-issledovatel'skiy kinofoto institut; Motion Picture and Photography Scientific Research Institute]. Certain visual and kinematic criteria were used for selecting events for analysis and, as a result, most of the interactions selected were p-p collisions. Orig. art. has: 2 figures and 2 formulas.
[JPRS: 38,168]

SUB CODE: 20 / SUBM DATE: 22Feb65 / ORIG REF: 007 / OTH REF: 008

Card 2/2

TAKHTMBAYEV, F.M.

Evaporation of underground waters in the southern part of Khorezm Province. Uzb.geol.zhur. 6 no.4:36-39 '62. (MIRA 15:9)

1. Uzbekskiy gidrogeologicheskiy trest.
(Khorezm Province--Soil moisture)

RAKHIMBAYEV, G.F., inzh.

"Peat" building at the exhibition of the achievements of the Soviet national economy. Torf.prom. 36 no.4:28-29 '59. (MIRA 12:9)

1. Vystavka dostizheniy narodnogo khozyaystva SSSR.
(Moscow--Peat industry--Exhibitions)

RAKHIMBAYEV, G.F., inzh.

"Peat" pavilion at the 1958 All-Union Industrial Exposition. (MIRA 11:7)
Torf. prom. 35 no. 4:23-25 '58.

1. Vsesoyuznaya promyshlennaya vystavka.
(Peat--Exhibitions)

RAKHIMBAYEV, I.

Simple procedure for preparing cellophane bags for dialysis. Lab. delo no.1:56-57 '64. (MIRA 17:4)

1. Laboratoriya biokhimii AN KazSSR, Alma-Ata.

*

AKHMETOVA, N.; RAKHIMBAYEV, I.

"Tary" should be prepared by industrial methods. Muk.-elev. prom. 28 no.5:26-27 My '62. (MIRA 15:5)

1. Kazakhskiy zhenskiy pedagogicheskiy institut, Alma-Ata (for Akhmetova). 2. Institut botaniki AN Kazakhskoy SSR (for Rakhimbayev).
(Kazakhstan—Cookery (Millet))