"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R001134130002-6

MIKHRINA, Ye.N.

Amount of free sugar in rye. Spirt. prom. 24 no.2:4-5 '58.
(Rye--Analysis) (Sugars) (MIRA 11:3)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R001134130002-6"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R001134130002-6

AUTHORS: Mikhrina, Ye.N. and Timofeyeva, M.Ya. SOV/71-59-2-5/26

TITLE: Determination of Pentose in the Presence of a Great Quantity of Glucose (Opredeleniye pentoz v prisutstvii bol'shogo kolichestva glyukozy)

PERIODICAL: Spirtovaya promyshlennost', 1959, Nr 2, pp 12-14 (USSR)

ABSTRACT: In order to determine the presence of pentose the Meybaum method, modified by Lyubimova, can be used, which method is based on the orcein reaction of Bial'. Orcein-methyl-resorcin $CH_3C_6H_3(OH)_2+H_2O$ is obtained by dry distillation of orsellin (dioxy-o-toluyl) acid. At the present time the Khar'kovskiy zavod khimicheskikh reaktivov (Khar'kov Plant of Chemical Reagents) has started production of synthetic orcein. The orcein method has the advantage of permitting direct determination of pentose without recurring to any preliminary distillations. However, this method is not applicable in the presence of large quantities of hexose and oligo-saccharids, unless these are first removed by fermentation. The article describes the procedure in detail. Table 1 shows results of determination of contents of sugar and pentose (in %) in hydrolysates, in accordance with the orcein method and with the instructions pertaining to the technological control of alcohol production. In order to prove that the presence of unfermented glucose has no notable effect on the accuracy of determination of pentose in hydrolysates, a number of experiments

Card 1/2

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Determination of Pentose in the Presence of a Great Quantity of Glucose

were made with small additions of glucose. In tests made with 10% of arabinose and 5, 10, 20% glucose the error amounted to +2.5%, +6.4% and +15.2% respectively. Table 2 shows the results of analyses of mash made from various grains, such as rye and wheat, and mixtures 1:1 of both. In the event of glucose contents amounting to 40%, the quantities of pentose, determined in the mash, equaled the quantity of pentose determined in the same mash after secondary fermentation.
There are 2 tables and 2 non-Soviet references.

Card 2/2

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"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R001134130002-6

RUKHLYADEVA, A.P.; MIKHRINA, Ye.N.; GRACHEVA, I.M.

Accuracy of the polarimetric method for determining the starch content of grain. Trudy TSNIISP no. 8:89-98 '59.
(MIRA 14:1)

(Grain) (Starch)

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"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R001134130002-6

VERZILOV, V.F.; MIKHTELEVA, L.A.

Effect of gibberellic acid on the growth and fertility of remontant strawberries. Biul. Glav. bot. sada no.51:93-97 '63. (MIRA 17:2)

1. Glavnyy botanicheskiy sad AN SSSR.

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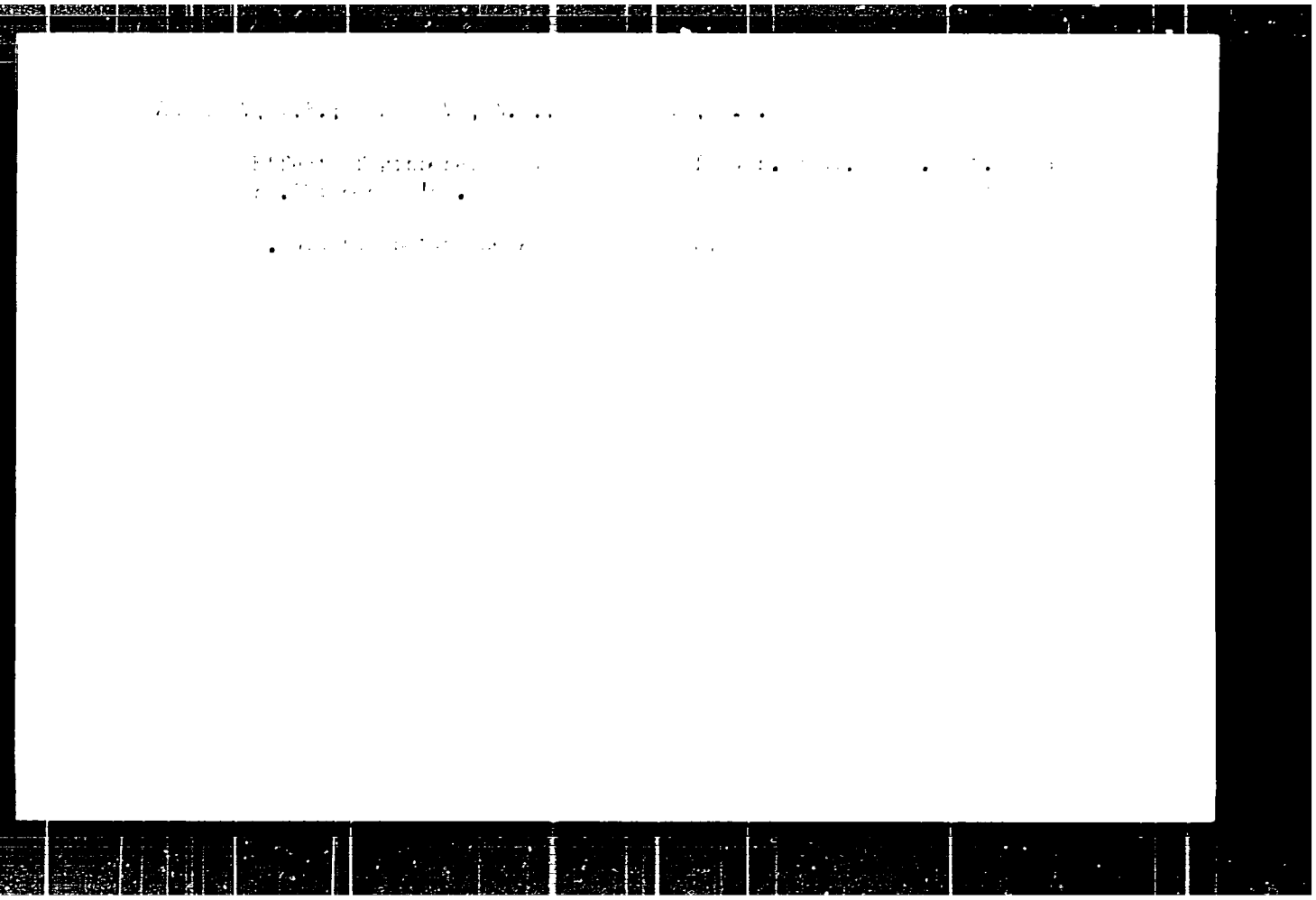

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"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R001134130002-6

ACC NR: AP6032943 (A) SOURCE CODE: UR/0026/66/000/009/0105/0106

AUTHOR: Mikhteleva, L. A.

ORG: Main Botanical Garden, AN SSSR, Moscow (Glavnyy botanicheskiy sad AN SSSR)

TITLE: Gibberellin and yield of berries

SOURCE: Priroda, no. 9, 1966, 105-106

TOPIC TAGS: horticulture, plant growth, food technology, plant ecology, hormone

ABSTRACT: The effect of gibberellic acid on the yield of plain and remontant strawberries has been studied at the Main Botanical Garden of the AN SSSR in Moscow (Glavnyy botanicheskiy sad AN SSSR) for five years. Test plants were sprayed 2-3 times with 0.005% gibberellic acid solutions at 5-7 day intervals and compared with control plants. The experimental results show that 1) spraying of "Krasavitsa Zagor'ya" specimens after the flower buds have been formed increases the berry yield by 120% and the average berry weight to 7.95 g against 5.5 g produced by the control plant, 2) spraying increases the berry size of "Krasavitsa Zagor'ya" specimens and the berry quantity of "Komsomolka" specimens, 3) berries of sprayed specimens have a higher content of sugar and vitamin C than those of the control plant and, consequently, taste

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ACC NR: AP6032943

better, 4) the spraying effect continues through the following year and promotes higher berry yields without further spraying, and 5) spraying reduces the two fruit bearing periods of remontant strawberries to a single fruit bearing period with a more desirable and richer yield of berries. The results obtained provide perfectly good grounds for assuming that the application of gibberellic acid in the cultivation of strawberries under commercial conditions will undoubtedly help to obtain higher yields. Orig. art. has: 2 figures and 1 table.

SUB CODE: 06, 02/ SUBM DATE: none

Card 2/2

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R001134130002-6"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R001134130002-6

MIKHTIYEVA, N.A.

Materials on the mycoflora of the Kuba-Khachmas massif in Azerbaijan.
Izv. AN Azerb. SSR no.12:117-131 D '56. (MLRA 10:4)
(Kuba region--Fungi) (Khachmas region--Fungi)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R001134130002-6"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R001134130002-6

BELYAKOV, V.A.; VAN YUN-CHAN [Wang Yung ch'ang]; VEKSLER, V.I.; VIRYASOV, N.M.; VRANA, I.; DU YUAN'-TSAY [Tu Yuan-t'sai]; KIM KHI IN; KLADNITSKAYA, Ye.N.; KUZNETSOV, A.A.; MIKHUL, E.; NGUYEN, DIN TY; PATERA, I.; PENEV, V.N.; SOKOLOVA, Ye.S.; SOLOV'YEV, M.I.; KHOVOKL', T.; MIKHUL, A.

[Production of Λ-hyperons and K^0-mesons in π^-p-interactions at an energy of 7-8 Bev] Issledovanie protsessov rozhdeniia Λ-giperonov i K^0-mezonov v π^-p- vzaimodeistviiakh pri energii 7-8 Bev. [n.p. n.d.] 26 p. (MIRA 16:10)

(Mesons) (Hyperons)

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"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R001134130002-6

21(8)

AUTHORS: Mikhul, A. K., Petrashku, M. G. SOV/20-124-1-18/69

TITLE: The Fission of U^{238} by μ^--Mesons (Deleniye U^{238} μ^--mezonami)

PERIODICAL: Doklady Akademii nauk SSSR, 1959, Vol 124, Nr 1, pp 66-68 (USSR)

ABSTRACT: The possibility of such a fission was predicted by U. A. Wheeler (Ref 1). In principle, the following 2 processes may compete with each other: a) Capture of the negative muon on one of the optical trajectories and the following transitions to the states 2s - 2p - 1s, in which an energy of about 7 Mev (i.e. more than the fission threshold value) is liberated. b) Nuclear capture, in which, by the reaction $\mu^- + p \rightarrow n + \nu$ an excitation energy of the nucleus of about 15 Mev is obtained. Short reference is made to several previous papers dealing with this subject. In the present paper 26,975 processes of stopping negative muons in plates prepared with uranyl were investigated. Method of investigation: 200 NIKFI-R micron-plates were at first saturated with water for 25 minutes, after which they were kept for 40 minutes in a saturated acetic-acid uranyl solution. They were then dried for one hour and irradiated with negative muons for 3 hours; this was done in a

Card 1/3

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R001134130002-6"

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π^- + μ^--meson beam on the synchrocyclotron of the Ob"yedinennyy institut yadernykh issledovaniy (United Institute for Nuclear Research). The negative pions (150 Mev) were filtered by means of a copper block. A total of 59 cases of fission was found. In 1 cases the track of the meson ended in a star with 4 rays. The upper limit of the admixture of negative pions was estimated at 0.002 $\pm$ 0.001. In the case under investigation 0.5 fissions out of a total of 59 were caused by negative pions. The probability P, with which a negative muon which was stopped in the plates caused fission, is equal to $(2.2 \pm 0.3).10^{-3}$. In all cases the ranges of the fission fragments were measured with an accuracy up to $\pm 1\mu$. A histogram shows the ratios of the ranges of the two fragments, and another shows the differences of the distances between the fragments. Analysis of results: the experimentally determined probability makes it possible to calculate the fission probability P_f from the ratio $P_f = P/0.4\ P_c$ if certain conditions concerning the probability P_c of the capture of a negative muon by an atom are made. P_c was calculated according to the Fermi-Teller law (Ref 12) and on the basis of experimental results obtained by

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J. C. Sens et al. (Ref 13). In these two cases the values 0.08 ± 0.01 and 1.13 ± 0.14 are obtained for P_f. Discussion:

A rigorous analysis of the fission of uranium by negative muons is impossible because experimental data for atomic capture in the case of large Z are not available. On the basis of the afore-mentioned histograms it might be concluded that the initially mentioned process a) occurs in 20% of cases. In process b) the value 0.06 is found as a rough estimate for the fission probability of Pa^{238}. The authors thank Kh. Khulebey, V. P. Dzhelepov, A. Ye. Ignatenko, and V. M. Sidorov for their constant interest in the present paper and for useful discussions; they further thank M. Antonova and V. Vasilenko for their help in looking through the plates. There are 1 figure and 17 references, 2 of which are Soviet.

ASSOCIATION: Ob"yedinennyy institut yadernykh issledovaniy(United Institute for Nuclear Research)

PRESENTED: August 29, 1958, by V. I. Veksler, Academician

SUBMITTED: August 26, 1958

Card 3/3

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"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R001134130002-6

21(7) SOV/56-[illegible]-17/62

AUTHORS: Petrashku, M. G., Mikhul, A. [illegible]

TITLE: The Fission of Th^{232} Nuclei by Negative μ- and π-Mesons (Deleniye yader Th^{232} otritsatel'nymi μ- i π-mezonami)

PERIODICAL: Doklady Akademii nauk SSSR, 1959, Vol 126, Nr 4, pp 752 - 754 (USSR)

ABSTRACT: In the introduction, two kinds of fission of heavy nuclei by μ^--mesons are described: 1) The nucleus is excited in the optical transition 2p - 1s of a μ^--meson in the mesic atom if the transition energy exceeds the photofission threshold. 2) Absorption of a meson by the nuclear nucleons according to the reaction $\mu^- + p \rightarrow n + \nu$. D. F. Zaretskiy focused attention upon the radiation-free excitation according to the first method. The aim of the present paper is stated to be the investigation of the fission of thorium by μ^-- and π^--meson capture. The investigation methods and the irradiation by μ^-- and π^--mesons are explained, after which experimental results are discussed. First, fission of thorium by π^--meson capture is dealt with. 11075 stops were observed, and the

Card 1/3

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R001134130002-6"

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distribution of 2847 σ-stars is given. By comparison with other data, the fraction of μ^--mesons in the present case is estimated as amounting to 15%. The fission of thorium in μ^--meson capture was investigated in the case of 11270 stops. For both kinds of fission the path length is given, and in the course of the discussion of results, the probability of the capture of mesons by thorium is calculated according to Fermi-Teller. It was further found that the ratio of fission probabilities of thorium and uranium is equal to the ratio of the corresponding cross sections of photofission. The probability of the fission of thorium by μ^--mesons is dealt with last and the ratio of the probabilities of radiation-free excitation and that of the emission of a γ-quantum in the transition 2p - 1s is given as amounting to

$\frac{W_o}{W_\gamma} = 0.1 \pm 0.07$. The authors thank Professors Kh. Khalatov, V. I. Lzhelepov, B. M. Pontekorvo, V. M. Sidorov, A. Ye. Ignatenko, and S. Ionesku for their constant interest in this investigation and for their advice, and he further thanks M. N. Antonova and L. K. Vasilenko for their help in checking the films

Card 2/3

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"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R001134130002-6

The Fission of Th^{232} Nuclei by Negative μ - and π-Mesons SOV/20-12[illegible]-4-17/62

There are 1o references, 5 of which are Soviet.

ASSOCIATION: Ob"yedinennyy institut yadernykh issledovaniy (Joint Institute of Nuclear Research)

PRESENTED: February 10, 1959, by V. I. Veksler, Academician

SUBMITTED: January 24, 1959

Card 3/3

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R001134130002-6"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R001134130002-6

Mikhul A. K

56-2-41/61

AUTHORS: Bogachev, N. P. , Mikhul, A. K. , Petrashku, M. G. , Sidorov, V. M.

TITLE: On the Angular Distribution of the Positive Myons Generated by a (π-μ)-Decay (Ob uglovom raspredelenii μ^+-mezonov ot (π-μ)-raspada)

PERIODICAL: Zhurnal Eksperimental'noy i Teoreticheskoy Fiziki, 1[illegible], Vol 34, Nr 2, pp 31 - 532 (USSR)

ABSTRACT: First the authors mention several earlier works dealing with the same subject. The present work gives the results of the examination of 10.000 (π-μ)-decay processes of positive myons which came to a standstill in an НИКФИ emulsion of the P type. The emulsions were irradiated in a positive beam of the synchrocyclotron of the Laboratory for Nuclear Problems (Laboratoriya yadernykh problem) and during their exposure they were encased within a steel screen which protected them against the action of the exterior magnetic field. The (π-μ)-decay processes were observed by means of an examination with the МБИ-3 microscope with about 100-fold en-

Card 1/3

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56-2-48/51

On the Angular Distribution of the Positive Myons Generated by a (π -μ)-Decay

largement. The angular distribution resulting immediately on inspection is shown in a diagram. The asymmetry coefficient of this angular distribution is b = - 0,048 $\pm$ 0,010. Then the authors shortly report on the estimate of systematical errors. The probability of the observation of a (π -μ)-decay process decreases within the range of small values of the angle θ^* between the final direction of the positive pion and the initial direction of the positive myon. The distribution determined by direct observation was corrected taking into account the registration probability and the experimentally determined distribution of the angles between the initial direction and the final direction of the positive pions. The corrected distribution of positive myons through the projections of the angles is shown in a diagram. The coefficient of asymmetry of this angular distribution is b = + 0,009 $\pm$ 0,018. Therefore the angular distribution of that part of positive myons which are generated by the π -μ-decay of the positive pions which had come to a standstill is isotropic. The cause for the asymmetry observed in some works can at least partly be connected with a systematical error investigated in this work. There are 2 figures,

Card 2/3

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On the Angular Distribution of the Positive Myons Generated by a $(\pi-\mu)$-de-
cay

and 5 references, none of which is Slavic.

ASSOCIATION: United Institute for Nuclear Research
(Ob"yedinennyy institut yadernykh issledovaniy)

SUBMITTED: December 4, 1957

AVAILABLE: Library of Congress

1. Myons-Scattering 2. Synchrocyclatron-Applications 3. Emulsion irradiation-Processes

Card 3/3

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"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R001134130002-6

(2)

C/026/61/017/005/001/006
F050/F004

AUTHOR: Wang, Kang-ch'ang (3769/3227/2490); Wang, Chu-hsiang (3769/4376/5046); Viryasov, N. M.; Ting, Ta-chao (0002/1129/6856); Kim, Hi-in (6855/5593/0088); Kladnitskaya, Ye. N., Kuznetsov, A. A.; Mikhul, A.; Nguyen, Din-ti (7086/0002/6337); Nikitin, A. V.; and Solov'yev, M. L.

TITLE: Production of Ξ^- hyperons by the use of π^- mesons with a momentum of 7030 Mev/c and 8000 Mev/c

PERIODICAL: Wu Li Hsüeh Pao, v. 17, no. 5, 1961, 205-213

TEXT: The productive cross section σ ($\sigma = 3.6 \pm \frac{2.5}{2.1}$ μb/N at 6800 Mev/c, $\sigma = 10.6 \pm \frac{4.1}{3.2}$ μb/N at 8000 Mev/c), mass M_{Ξ^-} ($M_{\Xi^-} = 1317.0 \pm 2.2$ Mev), and lifetime τ_0 ($\tau_0 = 3.5 \pm \frac{3.4}{1.2} \times 10^{-10}$ sec) of Ξ^- hyperon were determined by the use of π^- mesons having momentums of 6800 Mev/c and 8000 Mev/c. In early investigations Ξ^- hyperons

Card 1/4

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R001134130002-6"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R001134130002-6

Production of Ξ^- hyperons by ...

were found by experiments with cosmic rays. A butane bubble chamber 24 liters in volume in a permanent magnetic field of 13700 gauss was used. The chamber was irradiated by a bundle of mesons with momentums of 7000 Mev/c and 8000 Mev/c. The result was 27,000 and 75,000 negatives obtained recording momentums of 6800 $\pm$ 600 Mev/c and 8000 Mev/c of π^- mesons. A three-dimensions amplifier and projector were used to trace the negatives twice and some negatives were traced three times. In the tracing process those events which could be classified with Ξ^- hyperon decay scheme $A \longrightarrow V^0 + B$, $V^0 \longrightarrow C + D$, by appearance were selected. The following standards were applied in the determination of Ξ hyperons: (1) V^0 must coincide with kinematics of the decay scheme $\Lambda^0 \longrightarrow p + \pi^-$. (2) The refraction point must be within the Λ^0 decay plane. The vertical momentum of π^- meson and proton p, which came from Λ^0 decay relative to the projecting direction of Λ^0, must be in equilibrium. (3) The Λ^0 decay particles should lie on the plane formed by particles A and B. (4) At the refraction point, the vertical momentum of particles Λ^0 and B particle must be in equilibrium. (5) The events must satisfy kinematics of Ξ^- hyperon decay scheme

$$\Xi^- \longrightarrow \Lambda^0 + \pi^- + 65 \text{ bev}$$

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F050/F004

Production of Ξ^- hyperons by ...

Among all the events there were 11 events which satisfied all 5 standards. Three events coincided well with the kinematics of Ξ^- decay and have been classified with Ξ^- hyperon. Of all Ξ^- hyperons, one was obtained by the bundle of π^- mesons with 6800 Mev/c and then were obtained by the bundle of π^- mesons with 8000 Mev/c. The results of this experiment are listed in four tables: (1) Table 1 lists data of defined Ξ^-. All these data were average values which were obtained by using a microscope to measure two — four times independently. It also lists the decay energy Q and lifetime of all Ξ^- hyperons found in their own coordinate system. (2) Table 2 lists all data concerning the primary stars. These stars have been analyzed as the source of Ξ^- hyperons. (3) Table 3 lists the momentum p^* in a π^- N mass center system, vertical momentum $p^\perp$, and projecting angle θ^* of Ξ^- hyperons (suppose Ξ^- hyperons were produced by the impact of π^- mesons to free nuclei). The average vertical momentum ($p^\perp_{\Xi^-}$) of Ξ^- hyperon is equal to 318 ± 35 Bev. This value is approximate to the vertical momentum of proton and Λ hyperon. This table also lists the characteristics of the following angles: (a) θ^{lb}_Λ is the projecting angle of Λ^0 which is projected out from Ξ^- hyperon decay process under its equilibrium

Card 3/4

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R001134130002-6"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R001134130002-6

Production of Ξ^- hyperons by ...

system. (b) θ^*_p is the projecting angle of p which was projected out from the decay process in its equilibirum system. (c) $\omega_{\Xi^-\Lambda^\circ}$ is the intersection angle between Ξ and Λ° decay planes. In the distribution of θ^*_Λ and $\omega_{\Xi^-\Lambda^\circ}$, no asymmetry was observed. (4) Table 4 lists the events which seems to be Ξ^-. Among these events, four were in the same plane and fourteen were in different planes. Most of these events in the same plane were induced by $\pi^+\pi$ mesons; the others in different plane events may have been induced by π^+, π^- or K^- mesons. Thanks are extended to V. L. (Wei Ke Shih Lai Erh), I. V. (Chi Wei Lo), L. P. (Chi Lo Wei Yeh Fu), N. I. (Pa Pu La Fe), K. V. (Chi Ho Lo Fu), and L. N. (Chi Lao Yeh Fu). There are 3 figures and 4 tables. The English-language references read as follows: C. Franzinetti and G. Morpurgo. Suppl. Nuovo Cim. 6 (1957), 565; W. B. Fowler et al. Nuovo Cim. 11 (1959), 428.

SUBMITTED: March 20, 1961

Card 4/4

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R001134130002-6"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R001134130002-6

22124

S/056/61/040/003/004/031
B102/B202

AUTHORS: Wang Kang-ch'ang, Wang Ta-ch'eng, Firsov, V.M., Sit-6, Zaitsev, Kim Khi In, Klemitskaya, Ye.S., Kuznetsov, A.A., Mikhul, A., Nguyen Din Ty, Shafiyev, A.F., Shvachkin, N.P.

TITLE: Production of Ξ^- hyperons by π^- mesons with the ... Bev/c

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 40, no. 3, 1961, 734 - 740

TEXT: The authors present comprehensive material concerning the production of Ξ^--hyperons by negative high-energy pions in a 24-l propane bubble chamber which was in a constant field of 13,750 oe. These experiments have already been described in an earlier paper (ZhETF, 38, 428, 1960). 27,000 photographs were evaluated 2 - 3 times for pions with 6.4 Bev/c and 75,000 for pions with 8 Bev/c. The authors chose those events which corresponded to a decay of charged particles according to the mode

Card 1/4

22124

S/056/61/040/003/004/031
B102/B202

Production of Ξ^- hyperons by ...

$\Lambda \to p^0 + \pi^-$, $p^0 \to e^+ + \nu$ as well as all singly-pronged stars from the vertex of which a V^0 particle departed. Altogether, 90 events were chosen; they were measured by means of an electronic computer of the type "Ural" [illegible] were evaluated by means of an electronic computer according to the identification criteria. The angular and momentum characteristics of the identified Ξ^- hyperons are given in Figs. 1 and 2, respectively. [illegible] 19-179 are schematically shown in Fig. 3 and the lifetime (until the decay) of the Ξ^- hyperons. The mean value of Q from the Ξ^- decay events was $\bar{Q} = 61.9 \pm 2.2$ Mev from which the hyperon mass $M_{\Xi^-} = 1317.7 \pm 2.2$ Mev was calculated. The mean lifetime was $\tau_0 = (3.5^{+3.4}_{-1.2}) \cdot 10^{-10}$ sec. The mean free path of the Ξ^- mesons in Ξ^--hyperon formation in propane was $\lambda = (2.02^{+2.06}_{-0.84})$ cm for a momentum of 6.8 Bev/c and $\lambda = (0.68^{+0.29}_{-0.20})$ cm for ~8 Bev/c. Assuming that the Ξ^--hyperon production cross section in nu-

Card 2/4

22124

S/056/61/040/003/004/031
B102/B202

Production of Ξ^- hyperons by ...

clei is $\sim A^{2/3}$, $\sigma = 3.6^{+2.5}_{-2.1}$ b is obtained with 6.8 Bev/c and $\sigma = 10.6^{+4.4}_{-3.2}$ mb with ~8 Bev/c. Table 2 gives data on the primary stars with Ξ^- hyperon production. Table 3 shows the momentum (p_Ξ), transverse momentum ($p_\perp$), angle of departure (ϑ^*) of the various particles as well as the angle between the decay planes (φ^*). Table 4 presents data on the "background"events (4 compliant and 4 noncompliant ones where V^0 particles were identified as Λ particles. Finally, the authors thank V.I. Veksler and I.V. Chuvilo for discussion, L.P. Zinov'yev, N.N. Pavlov, K.V. Cherkhlov, L.N. Belyayev and various teams of technicians for their assistance. There are 5 figures, 4 tables, and 7 references: 5 Soviet-bloc and 2 non-Soviet-bloc.

ASSOCIATION: Ob"yedinennyy institut yadernykh issledovaniy (Joint Institute of Nuclear Research)

SUBMITTED: September 30, 1960

Card 3/4

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R001134130002-6"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R001134130002-6

VAN YU-CHAN [Wang Yung-ch'ang]; VEKSLER, V.I.; DU YUAN'-TSAY [Tu Yuan-ts'ai]; KLADNITSKAYA, Ye.N.; KUZNETSOV, A.A.; MIKHUL, A.; NGUYEN DIN TY; PENEV, V.N.; SOKOLOVA, Ye.S.; SOLOV'YEV, M.I.; SARANTSEVA, V.R., tekhn. red.

[Generation of ΛK^{o} and $K^{o}K^{o}$ pairs in $\pi^{-}P$ interactions at π^{-}-meson energies of 7-8 Bev/c.] Izuchenie rozhdeniia ΛK^{o} i $K^{o}K^{o}$-par v $\pi^{-}P$ - vzaimodeistviiakh pri impul'se π^{-}-mezona 7-8 Bev/s. Dubna, Ob"edinennyi in-t iadernykh issledovanii, 1962. 15 p. (MIRA 15:6)

1. Institut Atomnoy fiziki, Bukharest (for Mikhul).
(Mesons) (Nuclear reactions)

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"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R001134130002-6

MIKHUL, A.

[illegible]/043/003/013/063
[illegible]

AUTHORS: [illegible], Vekslev, V. I., [illegible], Kl[illegible], [illegible], [illegible], [illegible], Nguyen Din Ty, [illegible], [illegible], [illegible], Ye. S. Solov'yev, M. I.

TITLE: Investigation of ΛK^0 and $K^0 K^0$ pair production in π^- interactions with π^- meson momentum of [illegible] Bev/c

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. [illegible], no. [illegible], [illegible], [illegible]-[illegible].

TEXT: Pair production events, including 52 ($\Lambda + K^0$), 37 ($K^0 + K^0$), [illegible] either ($\Lambda + K^0$) or ($\bar{K} + K^0$) and two ($\Lambda + K^0 + K^0$) were observed among [illegible],000 photographs made with a 24-liter propane bubble chamber. The momentum and angular distributions of the π^+, Λ and K^0 particles were determined. Also the distribution of

$$Q = [2(E_{\Lambda(K)}E_K - P_{\Lambda(K)}P_K \cos\vartheta_{\Lambda(K),K}) + m^2_{\Lambda(K)} + m^2_K]^{1/2} - m_{\Lambda(K)} - m_K \quad (1)$$

(P - momenta)

Card 1/3

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"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R001134130002-6

S/056/62/043/003/013/063
B102/B104

Investigation of K^0 and...

ASSOCIATION: Ob"yedinennyy institut yadernykh issledovaniy (Joint Institute of Nuclear Research). Institute of Atomic Physics, Bucharest (A. Mihul)

SUBMITTED: April 11, 1962

Card 3/3

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"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R001134130002-6

MIKHUL, A

8

S/056/63/044/002/007/065
B102/B186

AUTHORS: Belyakov, V. A., Wang Yung Ch'ang, Vekeler, V. I., Viryasov, N. M., Vrana, I., Tu Yüan-te'ai, Kim Khi Ying, Kladnitskaya, Ye. N., Kusnetsov, A. A., Mikhul, E. Nguyen Din Ty, Patera, I., Penev, V. N., Sokolova, Ye. S., Solov'yev, M. I., Khofmokl', T., Cheng Ling-yen, Mikhul, A.

TITLE: Investigation of Λ-hyperon and K^0-meson production processes in π^-p interactions at 7-8 Bev

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 44, no. 2, 1963, 431-443

TEXT: The c.m.s. momentum and angular distributions determined for the Λ and K^0 particles produced in πp interactions are given and discussed. The measurements were made using a 24-liter propane bubble chamber in a field of 13,700 oe. The total momentum spectrum of the Λ-hyperons produced in the reactions

$$\pi^- + p \to \Lambda(\Sigma^0) + K^0 + n\pi, \quad (1)$$
$$\pi^- + p \to \Lambda(\Sigma^0) + K^+ + n\pi \quad (2)$$

Card 1/7

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S/056/63/044/002/007/065
B102/B186

are shown in Fig. 1, compared with theoretical results. As it may be seen the statistical theory describes the experimental curve very well if the isobars and the cases with p_p-p - Δ<700 Mev are neglected.

Δ < 700 Mev corresponds to ~30% of all Λ, these being produced in peripheral interactions. The Λ angular distribution has a distinct backward peak ($\bar{n}_\Lambda/\hat{n}_\Lambda$ = 0.18 ± 0.02). With increasing multiplicity n_s the agreement between experiment and statistical theory improves. The Λ angular distribution and the distribution with respect to $p_\perp$ is virtually independent of n_s. The overall mean of the transverse momentum is 385 ± 12 Mev/c; for Δ < 700 Mev, $\bar{p}_{\Lambda_\perp}$ = 295 ± 14 Mev/c and for Δ ⩾ 700 Mev, $\bar{p}_{\Lambda_\perp}$ = 452 ± 18 Mev/c. For the $K^0(\bar{K}^0)$ mesons produced in the reactions

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Investigation of Λ-hyperon ...

$$\pi^- + p \rightarrow \begin{cases} K^0 + \Lambda(\Sigma^0) + n\pi, & (1) \\ K^0 + \bar{K}^0 + N + n\pi, & (3) \\ K^0 + K^- + N + n\pi, & (4) \\ \bar{K}^0 + K^+ + N + n\pi, & (5) \\ K^0 + \Sigma^\pm + n\pi. & (6) \end{cases}$$

the total momentum spectrum measured (Fig. 4) is weaker than that calculated according to the statistical theory. The angular distribution (Fig. 5) has, besides the isotropic part, a forward peak ($\hat{n}_{K^0}/\hat{n}_{K^0} = 1.61 \pm 0.15$). The forward-backward ratio decreases with increasing n_s. For the charged pions arising in Λ-production events the momentum distributions are, for $p_\pi^* \geq 400$ Mev/c, well described by the statistical theory without taking the isobars into account; for $p_\pi^* < 400$ Mev/c it is higher than that obtained from theory. The angular distributions for $n_s = 2, 4, 6$ are characterised by

Card 3/7

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S/056/63/044/002/007/065
B102/B186

Investigation of Λ-hyperon ...

$\bar{n}_{\pi^+}/\bar{n}_{\pi^+} = 1.10 \pm 0.12$, $\bar{n}_{\pi^-}/\bar{n}_{\pi^-} = 1.40 \pm 0.13$.

The mean number of π^0 mesons produced per π^-p interaction with Λ production is 1.25 ± 0.14. The angular distribution of π^- arising in stars with K^0 production has a flat forward maximum ($\bar{n}_{\pi^-}/\bar{n}_{\pi^-} = 1.10 \pm 0.10$). The mean number of charged particles produced together with Λ is $n_s = 2.22 \pm 0.13$ which agrees closely with the statistical theory without the isobars. The main part of Λ and K^0 is produced in two-pronged stars. The admixture of $K^0\Sigma^{\pm}$ pairs amounts to less than 20% of the number of K^0K^- + K^0K^+ pairs. The momentum distribution of charged pions from π^-p interactions with Λ-hyperon production are characterised by $\bar{p}^*_{\pi^+} = 425 \pm 16$ Mev/c and $\bar{p}^*_{\pi^-} = 444 \pm 15$ Mev/c. From a comparison of these angular distributions it is concluded that processes involving ΛK or $K\bar{K}$ pair production are more central than the usual processes of multiple pion production. If one divides the π^-p interactions with strange particle production into head-on

Card 4/7

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and peripheral collisions one can say that those involving $K\bar{K}$ pair production are rather of the head-on type than those with ΛK pair production. There are 15 figures and 2 tables.

ASSOCIATION: Ob"yedinennyy institut yadernykh issledovaniy (Joint Institute of Nuclear Research)

SUBMITTED: July 31, 1962

Fig. 1. Total momentum spectrum of hyperons; dashed line: without correction for recording probability; shaded area: events with $\Delta < 700$ Mev; curves obtained from statistical theory with (I) and without (II) isobars, and without the events with $\Delta < 700$ Mev (II').

Fig. 4. K^0 total momentum spectrum.

Fig. 5. K^0 total angular distribution.

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"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R001134130002-6

BELYAKOV, V.A.; VAN YUN-CHAN [Wang Yung-ch'ang]; VEKSLER, V.I.; VIRYASOV, N.M.; VRANA, I.; DU YUAN'-TSAY [Tu Yuan-ts'ai]; KIM KHI IN; KLODNITSKAYA, Ye.N.; KUZNETSOV, A.A.; MIKHUL, E.; NGUYEN DIN TY; PATERA, I.; PENEV, V.N.; SOKOLOVA, Ye.S.; SOLOV'YEV, V.I.; KHOFMOKL', T.; CHEN LIN-YAN'; MIKHUL, A. [Mihul, A.]

Study of Λ-hyperon and K^0-meson production in $\pi^- p$-interactions at an energy of 7 - 8 Billion Electron Volts. Zhur.eksp. i teor. fiz. 44 no.2:431-443 F '63. (MIRA 16:7)

1. Ob"yedinennyy institut yadernykh issledovaniy. 2. Sotrudnik Instituta atomnoy fiziki v Bukhareste (for Mikhul).

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R001134130002-6"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R001134130002-6

BELYAKOV, V.A.; VEKSLER, V.I.; VIRYASOV, N.M.; VRLNA, I.; KIM KHI IN; KLODNITSKAYA, Ye.N.; KUZNETSOV, A.A.; MIKHUL, A.; NGUYEN DIN TY; SOLOV'YEV, M.I.; KHOFMOKL', T.; CHEN LIN-YAN'

Production of Λ -hyperons by 7-8 Bev. negative π -mesons on hydrogen. Zhur. eksp. i teor. fiz. 45 no.2:88-89 Ag '63. (MIRA 16:9)

1. Ob"yedinennyy institut yadernykh issledovaniy.
(Hyperons) (Mesons)
(Nuclear reactions)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R001134130002-6"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R001134130002-6

BELYAKOV, V.A.; VAN YUN-CHAN [Wang Yung ch'ang]; VEKSLER, V.I.; VIRYASOV, N.I.; GRAMA, I.; DU YUAN'-TSAY [Tu Yuan-ts'ai]; KIM KI IR; KLADNITSKAYA, Ye.E.; KUZNETSOV, A.A.; MIKHUL, E.; NGUYEN, DIN TY; PAT...A, I.; PENEV, V.N.; SOKOLOVA, Ye.S.; SOLOV'YEV, M.I.; KHONFOKL', T.; MIKHUL, A.

[Production of Λ-hyperons and K^0-mesons in π^-p-interactions at an energy of 7-8 Bev] Issledovanie protsessov rozhdeniia Λ-giperonov i K^0-mezonov v π^-p- vzaimodeistviiakh pri energii 7-8 Bev. [n.p. n.d.] 76 p.
(MIRA 16:10)

(Mesons) (Hyperons)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R001134130002-6"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R001134130002-6

AUTHOR: Mikhul, E. K.

SOV/[illegible]

TITLE: The Statistical Weights of the Positive and Negative K-Mesons Produced in a Collision of Pions With Nucleons (Statisticheskiye vesa K^+- i K^--mesonov, rozhdayemykh v stolknovenii pionov s nuklonami

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, [illegible], Vol. 35, Nr 1, pp. [illegible] - 2[illegible] (USSR)

ABSTRACT: The author obtains the probability of the production of one ore more strange particles by projection of the isotopic space of the initial pion-nucleon system to the spaces of each strange particle. The sign of the [illegible] of each strange particle is taken into account. The author assumes that some pions may be produced simultaneously with the strange particles and that also isobar states may exist. Thus, the author calculated the statistical weights using Schwinger (Shvinger)'s and Gell-Mann's (Ref. [illegible]) assumptions on the global interaction of pions with baryons. The interaction of the pions with the K-, Λ-, Σ-, Ξ- particles are assumed to be much weaker than the interaction with

Card 1/3

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The Statistical Weights of the Positive and Negative [illegible] K-Mesons Produced in a Collision of Pions With Nucleons

nucleons. The numerical values of the statistical weights (which were calculated for the above mentioned assumptions for 5 BeV pions are given in a table. An K^- (or $\tilde{K}^+$) is found only in the group $K\tilde{K}$ (for which there is no essential difference between the above mentioned assumptions no difference between the corresponding quantities will be obtained. However, a distinct difference will be found for K^+ which is a part of the group $K\Sigma$. According to the data discussed in this paper, the hypothesis of Schwinger (Shvinger) and Gell-Mann agrees better with the experiments than the other hypotheses. The author thanks V S.Barashenkov for his constant interest in this paper. There are 1 table and 5 references.

ASSOCIATION: Ob"yedinennyy institut yadernykh issledovaniy (United Institute of Nuclear Research)

SUBMITTED: April 8, 1958

Card 2/3

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R001134130002-6"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R001134130002-6

BARASHENKOV, V.S.; MAL'TSEV, V.M.; MIKHUL, E.K.

Mechanism of the interaction of fast nucleons with nuclei. Atom. energ. 10 no.2:156-158 F '61. (MIRA 14:1)
(Nucleons) (Collisions (Nuclear physics))
(Nuclei, Atomic)

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"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R001134130002-6

L 17214-63 EWT(m)/BDS AFFTC/ASD

ACCESSION NR: AP3005297 S/0056/63/045/002/0381/0383

AUTHORS: Barashenkov, V. S.; Blokhintsev, D. I.; Mikhul, E. K.; Patera, I.; Semashko, G. L.

TITLE: Momentum spectrum of baryons in inelastic collisions between fast pions and nucleons

SOURCE: Zhur. eksper. i teoret. fiz., v. 45, no. 2, 1963, 381-383

TOPIC TAGS: baryon, momentum spectrum, pion-nucleon collision, pion-pion collision, SIGMA hyperon, LAMBDA hyperon

ABSTRACT: It is shown that the reason for the double peak observed in the Λ and Σ hyperon momentum spectrum in inelastic collisions between fast pions and nucleons at energies close to 10 BeV is a direct consequence of the resonant interaction between the primary negative pion and the intermediate particle that transmits the bulk of the interaction in peripheral pion-nucleon collisions. Similar double

Card 1/2

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L 17214-63
ACCESSION NR: AP3005297

maxima in the spectrum of the recoil nucleons can be attributed to resonance pion-pion interaction. Orig. art. has two figures.

ASSOCIATION: Ob"yedinennyy institut yadernykh issledovaniy (Joint Institute of Nuclear Research)

SUBMITTED: 25Apr63 DATE ACQ: 06Sep63 ENCL: 00

SUB CODE: PH NO REF SOV: 003 OTHER: 006

Card 2/2

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"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R001134130002-6

BELYAKOV, V.A.; VAN YUN-CHAN [Wang Yung-ch'ang]; VEKSLER, V.I.; VIRYASOV, N.M.; VRANA, I.; DU YUAN'-TSAY [Tu Yuan-ts'ai]; KIM KHI IN; KLODNITSKAYA, Ye.N.; KUZNETSOV, A.A.; MIKHUL, E.; NGUYEN DIN TI; PATERA, I.; PENEV, V.N.; SOKOLOVA, Ye.S.; SOLOV'YEV, V.I.; KHOFMOKL', T.; CHEN LIN-YAN'; MIKHUL, A. [Mihul, A.]

Study of Λ-hyperon and K^0-meson production in $\pi^-\pi^-$p-interactions at an energy of 7 - 8 Billion Electron Volts. Zhur.eksp. i teor. fiz. 44 no.2:431-443 F '63. (MIRA 16:7)

1. Ob"yedinennyy institut yadernykh issledovaniy. 2. Sotrudnik Instituta atomnoy fiziki v Bukhareste (for Mikhul).

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R001134130002-6"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R001134130002-6

BARASHENKOV, V.S.; BLOKHINTSEV, D.I.; MIKHUL, E.K. [Mihul, E.]; PATERA, I.; SEMASHKO, G.L.

Pulsed spectrum of baryons in inelastic collisions of fast pions with nucleons. Zhur. eksp. i teor. fiz. 45 no.2:381-383 Ag '63. (MIRA 16:9)

1. Ob"yedinennyy institut yadernykh issledovaniy. 2. Sotrudnik Instituta yadernoy fiziki v Bukhareste (for Mikhul).
(Baryons) (Mesons) (Collisions (Nuclear physics))

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R001134130002-6"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R001134130002-6

BARASHKOV, V.S.; BLOKHINTSEV, D.I.; MIKHUL, E.K.; PATERA, I.; SEMASHKO, G.L.; SARANTSEVA, V.K., tekhn. red.

[Polar theory of Λ -hyperon production in π N-interactions at high energies] Poliusnaia teoriia rozhdeniia Λ-giperonov v πN -vzaimodeistviiakh pri bol'shikh energiiakh. Dubna, Ob"edinennyi in-t iadernykh issledovanii, 1963. 16 p. (MIRA 16:6)

1. Institut atomnoy fiziki v Bukhareste (for Mikhul).
(Hyperons) (Mesons)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R001134130002-6"

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MIKHUL, K.; RUSCHOR, K.; POP, V.; SHVARTS, F.R.; REDULESKU, G.A.

Fluorescence spectra of motor fuels. Izv.AN SSSR.Ser.fiz.23 no.1:122-125 Ja '59. (MIRA 12:4)
(Fluorescence)
(Motor fuels--Spectra)

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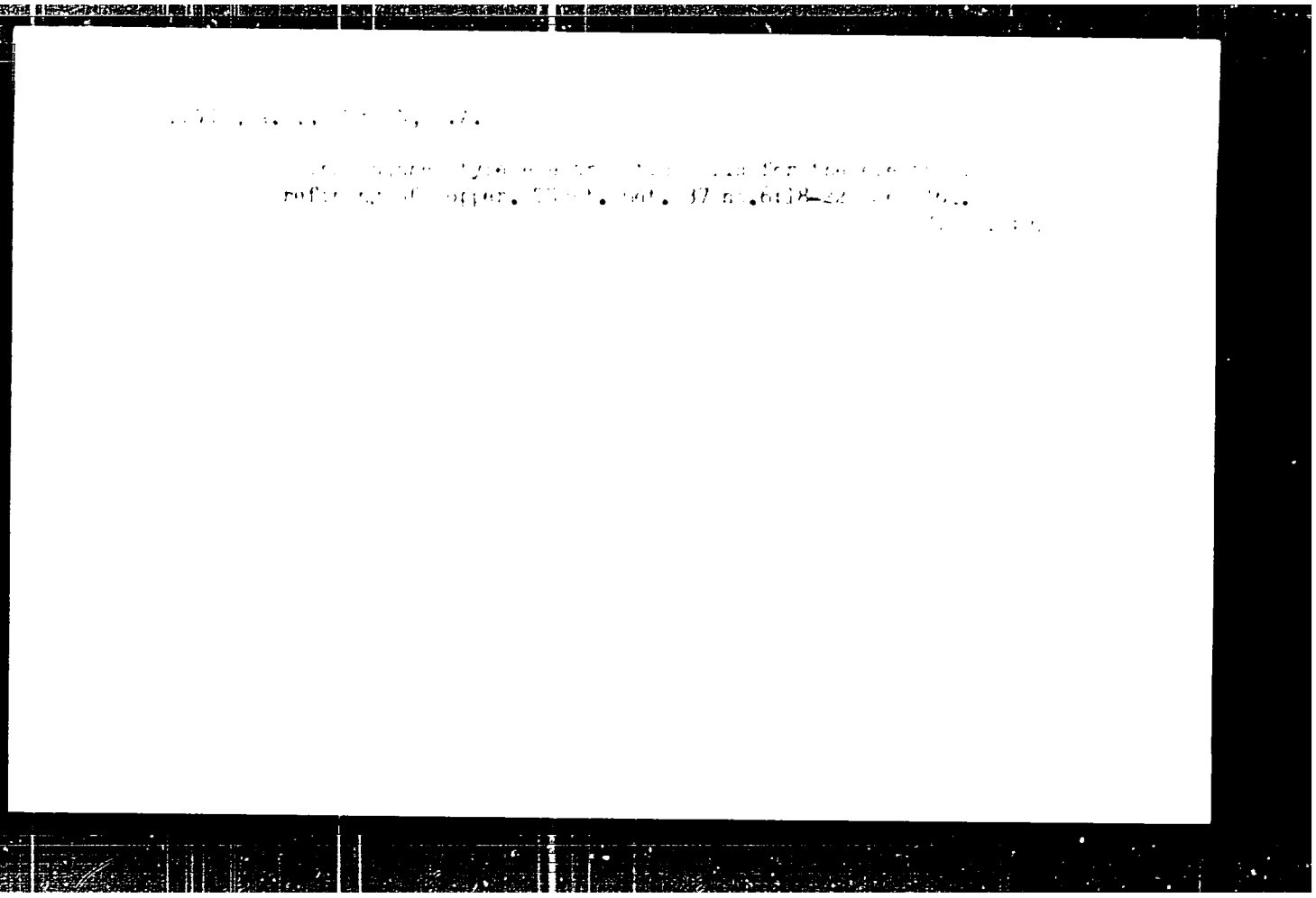

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"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R001134130002-6

MIKHURA, V.I., aspirant

Use of geothermal energy jointly with pumped-storage [illegible] power stations in local electric power systems. Trudy MEI no.46:85-95 '63. (MIRA 18:3)

1. Kafedra gidroenergetiki Moskovskogo ordena Lenina energeticheskogo instituta.

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"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R001134130002-6

MIKHURSKIY, S., RYZHENKOV, V.Ye.

Effect of nicotine on the amount of ascorbic acid in guinea pigs. Trudy LSGMI 45:42-45 '58 (MIRA 11:11)

1. Kafedra gigiyeny pitaniya Leningradskogo sanitarno-gigiyenicheskogo meditsinskogo instituta (zav. kafedroy - dots. Z.M. Agranovskiy).
(NICOTINE--PHYSIOLOGICAL EFFECT)
(ASCORBIC ACID)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R001134130002-6"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R001134130002-6

VOL'FSON, T.I.; GOLIKOV, A.P.; MIKHUSHKIN, M.K.

Effect of corn oil on lipoid metabolism and the development of atherosclerosis. Kardiologiia 1 no.5:29-34'61 (MIRA 17:4)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R001134130002-6"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R001134130002-6

MIKHUTDINOVA, R.Kh.

Seismic stability of a hydroelastic system. Izv. AN Uz. SSR. Ser. tekh. nauk 7 no.5:88-92 '63. (MIRA 17:2)

1. Tashkentskiy gosudarstvennyy universitet imeni V.I. Lenina.

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"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R001134130002-6

RUMANIA/Optics - Spectroscopy.

Abs Jour : Ref Zhur - Fizika, N 6, 1959, 14356

Author : Mikhvl, K., Ruschor, K., Pop, V., Shvarto, R., Pedalesky, Ye.A.

Inst : -

Title : Fluorescence of Motorines of Rumanian Oil

Orig Pub : An Stiint. Univ. Lasi. Soc. I., 1957, 3, No 1-2, 243-256

Abstract : An analysis of the fluorescence spectra of pure samples of motorines A_1 special, A_1, A_3 and O and their solutions in ether has shown that the fluorescence of the motorines is caused principally by the naphthalene, phenanthrene, and anthracene, and to a lesser extent by their homologues. The fluorescence spectra of motorine O differ considerably from the spectra of the remaining motorines (which are similar to each other), this being explained by the greater content of anthracene and its homologues. -- V. Klochkov

Card 1/1

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"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R001134130002-6

AKOL'ZIN, P.A., doktor tekhn.nauk; MIKHYALOVA, N.M., inzh.

Use of hydrazine in electric power stations. Teploenergetika 12 no.10:13-18 O '65. (MIRA 18:10)

1. Vsesoyuznyy teplotekhnicheskiy institut.

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R001134130002-6"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R001134130002-6

Miki, J.

Contribution to the article by Jaroslav Simecek "Safety Valves of Steam Turbines." p. 232. ENERGETIKA. (Ministerstvo paliv a energetiky. Hlavni sprava elektraren) Praha. Vol. 6, no. 5, May 1956.

Source: EEAL LC Vol. 5, No. 10 Oct. 1956

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"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R001134130002-6

MIKIASHVILI, SH. M.

"Study of the Properties of the MnO-SiO_2-Al_2O_3 System." Acad. Sci. USSR, Inst. of Metallurgy imeni A. A. Baykov, Moscow, 1955. (Dissertation for the Degree of Candidate in Technical Sciences)

SO: Knizhnaya Letopis', No. 22, 1955, pp 93-105

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"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R001134130002-6

Металлургия № 61

137-58-5-8882

Translation from Referativnyy zhurnal Metallurgiya 1958 No 5 p 9 USSR

AUTHORS Mikulinskiy Sh. M., Tsylev L. M., Samarin A. M.

TITLE Fusion Properties of the $MnO-SiO_2-Al_2O_3$ System (Svoystva rasplavov sistemy $MnO-SiO_2-Al_2O_3$)

PERIODICAL V sb. Fiz.-khim. osnovy proiz-va stali. Moskva, AN SSSR 1957 pp 423-432 Diskus. pp 505-512

ABSTRACT Viscosity of slags containing 5-30% Al_2O_3, 10-55% SiO_2, and 20.7-75% MnO was studied. A viscosity diagram for this system was constructed at 1500°C together with its pseudoisothermal discontinuities at 1400°, 1500°, and 1590°. The most fluid slags (0.5-2 poise at 1500°) are those which contain 18-48% SiO_2, 50-75% MnO, and 0-25% Al_2O_3. Smallest viscosity is exhibited by slags in which the concentration ratio $MnO:Al_2O_3$ = 6 and the SiO_2 content is under 40%. The viscosity of these slags varies very little with temperature. An increase in SiO_2 concentration produces a sharp increase in viscosity. Petrographic investigations revealed that fused slags contain tephroite, rhodonite, spessartine, manganosite, galaxite, cristobalite, and glass. The surface tension, σ_1, of low carbon steel and of slags of the sys-

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137-58-5 884?

Fusion Properties of the $MnO-SiO_2-Al_2O_3$ System

tem under investigation was determined by the method photographing a drop lying on a flat surface. Between temperatures of 1500° and 1595° the σ Fe amounts to 1305-1310 dynes/cm. The σ_{slag} becomes greater with increasing MnO content but is reduced by the presence of Al_2O_3 and SiO_2. The σ_{slag} is only slightly affected by temperature and, depending on the composition of the slag, varies between 280 and 670 dynes/cm. The magnitudes of the interphase tension between the slag and Fe were computed by measuring the marginal contact angle between a drop of liquid slag and a drop of liquid Fe as well as by employing the σ values obtained. The magnitude of the interphase tension varies from 800 to 1160 dynes/cm. Replacing MnO by SiO_2 and Al_2O_3 produces an increase in interphase tension. The results obtained are explained in the light of ionic theory of slags.

I. I.

1. Slags--Viscosity 2. Slags--Properties

Card 2/2

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MIKIASHVILI, Sh. M.

Distr: 4E2c

18

7

Viscosity of Molten Slags of the System: Manganese Oxide-Silica-Alumina. Sh. M. Mikiashvili, A. M. Samarin and L. M. Tavlay. (*Izvest. Akad. Nauk, S.S.S.R. Otdelenie Tekn. Nauk*, 1957, (1), 115-122). [In Russian]. The viscosity of molten slags of the system: $MnO:SiO_2:Al_2O_3$ corresponding in composition to the products of deoxidation of steel in the region of the lowest melting temperature was investigated. It was found that with increasing content of silica, the viscosity of homogeneously liquid slags increases and is determined mainly by the size of silicate anions. The viscosity of heterogeneously liquid slags at 1400–1590° C increases with decreasing silica content and is determined by the proportion of solid phase present. The lowest viscosity (0·5–10 poises) was observed for melts with $MnO:Al_2O_3 = 6$ and the content of silica from 20 to 30%. With decreasing $MnO:Al_2O_3$ ratio the viscosity of melts increases. An addition of alumina causes a slight increase in the viscosity of homogeneously liquid melts. The most fluid are melts with $MnO:SiO_2 = 2·6$ and containing up to 22% of alumina. With decreasing $MnO:SiO_2$ ratio, the viscosity of melts increases. An increase in the content of manganese oxide decreases the viscosity of homogeneously liquid slags. Melts of the lowest viscosity correspond in their composition to that of tefroite.

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137-58-4-6574

Translation from Referativnyy zhurnal Metallurgiya 1958 Nr 4 p 17 USSR

AUTHORS Bardin, I. P., Tsylev, L. M., Mikiashvili, Sh. M.

TITLE The Viscosity of Synthetic High-alumina Blast-furnace Slags (Vyazkost' sinteticheskikh vysokoglinozemistykh domennykh shlakov)

PERIODICAL Tr. in-ta metallurgii AN SSSR 1957 Nr 2, pp 9-13

ABSTRACT A rotary viscosimeter (Tsylev L. M., Popov I. A., Zavodsk. laboratoriya 1951, Nr 5, p 594) was employed to investigate slags of five different chemical groups (18 slags in all). (MgO) in the slags of Groups I, II and III was constant 5, 10 and 14% respectively. (MgO) and (Al_2O_3) were constant in the slags of Groups IV and V 5 and 28%, repectively in IV and 5 and 26% in V. The basicity of the (CaO/SiO_2) in these slags was in the 0.595-1.30 range. It was established that MgO reduces the m.p. of the slags under investigation while an increase in basicity increases it and significantly reduces the temperature interval within which the slags will crystallize. Substitution of MgO for CaO reduces the m.p. and this, it is hypothesized, explains the reduction in the amount of refract-

Card 1/2

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137-58-4-6574

The Viscosity of Synthetic High-Alumina Blast-furnace Slags

ory minerals forming upon the crystallization of the slags larnite $2CaO \cdot SiO_2$ (2130°), and itelenite $2CaO \cdot Al_2O_3 \cdot SiO_2$ (1590°). On the basis of the work done, the following is the composition of the slags recommended for blast furnace operations MgO 14% and CaO/SiO_2 = 0.815 (III), and the slags of the IV and V groups with CaO/SiO_2 basicities of 0.81 and 0.70 respectively These slags are of low viscosity and have a wider temperature interval of crystallization. The viscosities of the slags investigated are presented in tables and graphs. A broader investigation involving petrographic analysis is required to provide a clearer picture for the determination of the optimal composition of slag for the blast-furnace process.

A R

1. Slags--Viscosity 2. Blast furnaces--Application

Card 2/2

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"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R001134130002-6

AUTHORS: Mikiashvili, Sh. M., Samarin, A.M. and Tsylev, L.M. (Moscow).

TITLE: Interphase tension at the boundary slag-iron and surface tension of melts of the system $MnO-SiO_2-Al_2O_3$. 24-4-8/34
(Mezhfaznoye natyazheniye na granitse shlak-zhelezo i poverkhnostnoye natyazheniye rasplavov sistemy zakis' margantsa-kremnezem-glinozem).

PERIODICAL: "Izv. Ak. Nauk, Otd. Tekh. Nauk" (Bulletin of the Ac. Sc., Technical Sciences Section) 1957, No.4, pp.54-62 (USSR).

ABSTRACT: Popel, S.I., Esin, O.A. and Gel'd, P.V. (Dokl. Ak. Nauk, Vol.74, p.75, 1950) developed a method of direct determination of the interphase tension based on measuring the dimensions of the liquid drop of the metal in the slag by means of X-rays, since according to these authors calculation of the interphase tension at the surface of division of two liquid phases on the basis of the difference in the surface tension of these phases does not give reliable results for the system iron-slag. However, the use of the method of these authors is limited, due to the difficulty of selection of a refractory material for the crucible which is equally resistant to the chemical effects of the slag and the iron. The method of measurement of the interphase tension on the basis of the dimensions of the solidified metal drop in the slag yields very inaccurate results due to the appreciable deformation of the drop during the

Card 1/3

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Interphase tension at the boundary slag-iron and surface tension of melts of the system $MnO-SiO_2-Al_2O_3$. (Cont.)
24-4-8/34

process of solidification (Leont'eva, A.A. "Kolloidnyi Zhurnal", No.11, 1949). The method used by the authors of this paper is based on determining experimentally the boundary angle θ of the melt drop at the surface of the liquid iron (see Fig.1) by means of the test set-up as shown in Fig.2; a graphite heated furnace of 45 mm inner dia., a corundum crucible of 40 mm dia. and 2.5 to 3 mm depth containing technically pure iron is placed on a magnesite base. After melting the iron a drop of the studied slag is fed onto the iron surface by means of a specially designed graphite tube (Fig.3). The determined values of the boundary contact angles for various slag compositions at temperatures of 1510 to 1540 C are given in Table 2. The determined surface tension values for various slag compositions of the system $MnO-SiO_2-Al_2O_3$ are enumerated in Table 3. The graph, Fig.7, gives the interphase tension at the surface of sub-division of the melts of the system $MnO-SiO_2-Al_2O_3$ and the liquid iron, whilst the graphs, Fig.8, show the influence of substitution of silica for MnO on the interphase tension. It was found that substitution of MnO by silica leads to a considerable reduction of the surface tension; the silica is surface active at the boundary melt-gas. Addition of Al_2O_3 to the melts brings about, in the case of a constant

Card 2/3

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"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R001134130002-6

Interphase tension at the boundary slag-iron and surface tension of melts of the system $MnO-SiO_2-Al_2O_3$. (Cont.)

24-4-8/34

$MnO:SiO_2$ ratio, some increase in the surface tension which also increases in the case of a constant MnO content. The temperature has little effect on the surface tension of the melts. From the obtained values of the surface tension of the phases and of the boundary contact angle, the values of the interphase tension at the boundary of the slag melts with the liquid iron were determined. Substitution of MnO by silica leads to a considerable increase of the inter-phase tension which also increases if the MnO is substituted by Al_2O_3. MnO appears to be surface active at the boundary iron-slag melt. A certain reduction of the interphase tension was observed in the case of substitution of silica by alumina. Addition of alumina into the melt in the case of a constant $MnO:SiO_2$ ratio brings about an increase of the interphase tension. There are 8 figures, 3 tables, 10 references, all of which are Russian.

Card 3/3

SUBMITTED: May 3, 1956.

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"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R001134130002-6

MIKIASHVILI, Sh.M.

Determining the optimal composition of a deoxidizing alloy of the type AMS. Soob.AN Gruz.SSR 25 no.1:45-50 Jl '60. (MIRA 13:10)

1. Akademiya nauk Gruzinskoy SSR, Institut metallurgii, Tbilisi. Predstavleno chlenom-korrespondentom Akademii nauk Gruzinskoy SSR F.N.Tavadze.

(Alloys)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R001134130002-6"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R001134130002-6

MIKIASHVILI, Sh.L.

Interfacial tension on the boundary between liquid steel and melts of the system CaO - MgO - SiO_2. Trudy Inst. met. AN Gruz. SSR 11:83-93 '61. (MIRA 14:10)
(Surface tension)
(Liquid metals)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R001134130002-6"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R001134130002-6

MIKIASHVILI, Sh.M.; ARSENISHVILI, A.Yu.; BUKHRASHVILI, A.G.

Viscosity of the molten system CaO - MnO - SiO_2. Soob. Ak. Gruz. SSR 27 no.3:313-320 S '61. (MIRA 15:3)

1. Akademiya nauk Gruzinskoy SSR, Institut metallurgii, Tbilisi. Predstavleno akademikom F.N.Tavadze.
(Slag) (Viscosity)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R001134130002-6"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R001134130002-6

MIKIASHVILI, Sh.M.

Optimum composition of silicon-manganese-aluminum deoxidizing alloys. Trudy Inst.met. AN Gruz. SSR 12:55-61 '62. (MIRA 15:12)
(Silicon-manganese-aluminum alloys--Analysis)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R001134130002-6"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R001134130002-6

KEKELIDZE, M.A.; MIKIASHVILI, Sh.M.; ODILAVADZE, G.N.

Investigating the viscosity of syntnetic magnesia blast furnace slags. Trudy Inst. met. AN Gruz. SSR vol. 13:51-5[illegible] '62.
(MIRA 17:9)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R001134130002-6"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R001134130002-6

MIKIASHVILI, Sh.M.

Effect of sulfides on the surface tension of melts in the system calcium oxide - manganous oxide - silica. Soob. AN Gruz. SSR 29 no.5:548-554 N '62. (MIRA 18:3)

1. Institut metallurgii AN GruzSSR, Tbilisi. Submitted June 27, 1961.

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R001134130002-6"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R001134130002-6

GOGIBERIDZE, Yu.M.; KEKELIDZE, M.A.; MIKIASHVILI, Sh.M.

Effect of phosphorus on the surface tension and density of iron. Soob. AN Gruz. SSR 31 no.1:125-130 Jl '63. (MIRA 17:7)

1. Institut metallurgii AN Gruzinskoy SSR. Predstavleno akademikom F.N. Tavadze.

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R001134130002-6"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R001134130002-6

GOGIBERIDZE, Yu.M.; KEKELIDZE, M.A.; MIKIASHVILI, Sh.M.

Interfacial tension at the boundary separating Fe-P alloys from MnO- SiO_2 melts. Soob. AN Gruz. SSR 32 no. 1:117-124 O '63. (MIRA 17:9)

1. Institut metallurgii AN GruzSSR, Tbilisi. Predstavleno akademikom F.N.Tavadze.

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L 11177-66 EWT(m)/EPF(n)-2/T/EWP(t)/EWP(b)/EWA(c) JD/WW/JG

ACC NR: AP6004954 SOURCE CODE: RU/0027/65/010/001/0079/0087

AUTHOR: Mcedlisvili, V. A.; Mikiasvili, S. M. 69 B

ORG: Institute of Metallurgy, Tbilisi

TITLE: Effect of the surface properties of oxides on the process of the deoxidation of steel

SOURCE: Studii si cercetari de metalurgie, v. 10, no. 1, 1965, 79-87

TOPIC TAGS: liquid metal, iron, oxide, oxidation, steel, metal purification, surface property

ABSTRACT: A report on studies to determine the adhesion of relatively pure liquid iron and iron with an oxygen content of 0.023 percent, as well as steels, as against the hard compounds of the binary system Al_2O_3 - SiO_2 and as against the oxide inclusions formed in the system during deoxidation with silicon, aluminum and manganese alloys. Also reports on the determination of the interphase tension at the metallic limits with these phases and the qualitative estimate of the capacity for removing the deoxidation reaction products from the steel in terms of the surface properties. Orig. art. has: 4 figures and 2 tables. [JPRS]

SUB CODE: 11 / SUBM DATE: 15Oct64 / ORIG REF: 010 / OTH REF: 004

Card 1/1

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"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R001134130002-6

MIKIASHVILI, Sh.M.; GOGIBERIDZE, Yu.M.

Interphase tension and adhesion at the interface between iron-silicon alloys and melts in the system manganous oxide - alumina - silica. Soob. AN Gruz. SSR 38 no. 3:607-613 Je '65. (MIRA 18:12)

1. Gruzinskiy institut metallurgii, Tbilisi. Submitted Sept. 1, 1965.

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"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R001134130002-6

23664
Y/001/60/000/008/001/001
D221/D301

26.2120

AUTHOR: Mikić, Borivoje, Engineer

TITLE: Axial-flow compressor with a pre-determined change of Mach-number in relation to the radius

PERIODICAL: Tekhnika, no. 8, 1960, 1516-1520

TEXT: Due to considerable limitations in designing axial-flow compressors caused by a high Mach-number occuring at the top and the base of a blade, the author attempted to create a relatively new system permitting construction of axial-flow compressors with a pre-determined change of Mach-number in relation to the radius. According to the author, the advantage of such a system, compared with the system having a constant Mach-number, will be in fact that the criterion for an optimum Mach-number at the outlet is not equal at each radius due to various thicknesses and curvature of the blades. In conducting this study the author considers the velocity distribution before an operation cycle as determined a) by the differential equation of the radical equilibrium and b) by a certain

Card 1/5

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free relation as chosen by the designer. The distribution of the circumferential velocity is considered as determined by the equation $u = wr$, where u is the circumferential velocity, w - relative fluid velocity and r - radial distance from the compressor axle. If the pre-determined change of Mach-number $M(w_1) = f_1(v)$, where v is the dimensionless coordinate $v = r/r_a$, is taken as the free relation b, then a system which ensures the wanted change of Mach-number will be obtained. The distribution of velocities behind the rotor will also be determined by two relations a) the differential equation of the radial equilibrium in the outlet stage, and b) by one free condition, for which the stage work is very often considered as constant by units of weight along the radius. In addition the author takes another case where the change of the Mach-number at the outlet is determined in relation to the absolute outlet velocity, stating that such a system will be advantageous despite additional losses at the outlet, caused by the unsteady energy of the fluid. In working out the first system $M(w1) = f_1(v)$; $\frac{dH}{dr} = 0$ where H is total enthalpy

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Axial-flow compressor...

of the fluid expressed in mechanical units of mass, and r - radial distance from the compressor axle [Abstracter's note: d not identified], the author uses the equation for simplified radial equilibrium at the entry in an operation cycle in its differential form as the first condition

$$\frac{C_{u_1}^2}{r} + C_{u_1}\frac{dC_{u_1}}{dr} + C_{m_1}\frac{dC_{m_1}}{dr} = 0 \qquad (1)$$

In subsequent calculations the author arrives at equation

$$C_{m_2}^2 = C_{m_{2i}}^2 - C_{u_2}^2 + C_{u_{2i}}^2 - 2\int_{r_i}^{r}\frac{C_{u_2}^2}{r}\,dr \qquad (11)$$

The axial velocity at the base, as a constant of integration of the above equation is determined by the law of continuity. In the second system, Eq. (1) is not valid, except for the inlet in the first stage, where the index "1" denotes not only the inlet in the first stage, but the inlet in any of the stage. The axle velocity at the inlet, in such a case, will be determined in the same way as in the

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previous system. The author, considering that the outlet stage should give such a distribution of velocities that M(c2) changes in accordance with the pre-determined law $f_2(v)$, arrives at equation

$$\left(\frac{C_{m2}}{u_a}\right)^2 = \varphi_2\left[\frac{H_1}{u_a^2} + v\left(\frac{C_{u2}}{u_a} - \frac{C_{u1}}{u_a}\right)\right] - \left(\frac{C_{u2}}{u_a}\right)^2 \qquad (19)$$

which is valid for the axial component of the absolute velocity at the outlet, and from which C_{m2} and C_{u2}, C - specific heat at constant pressure, are determined. Therefore, the decrease of the cross-cut in the stage is not arbitrary but may be determined by the following equation of continuity

$$r_{2a}^2 - r_{2i}^2 - 2\int_{r_{1.i}}^{r_{1a}} \frac{C_{m1}}{C_{m2}} \frac{\rho_1}{\rho_2} r_1 dr_1 = 2\int_{r_{1.i}}^{r_{1a}} \frac{C_{m1}}{C_{m2}} \left(\frac{H_1 - \frac{C_1^2}{2}}{H_2 - \frac{C_2^2}{2}}\right)^{\frac{1}{n-1}} r_1 dr_1$$

where n is the exponent of the polytropic curve. The author points

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Axial-flow compressor...

out that all relations permitting the designing of an axial-flow compressor by one of both systems, as given in the article, may be of special importance for engines of small dimensions and weight.

ASSOCIATION: Vazduhoplovno-tehnički institut (Institute of Aeronautical Technology) Žarkovo

Card 5/5

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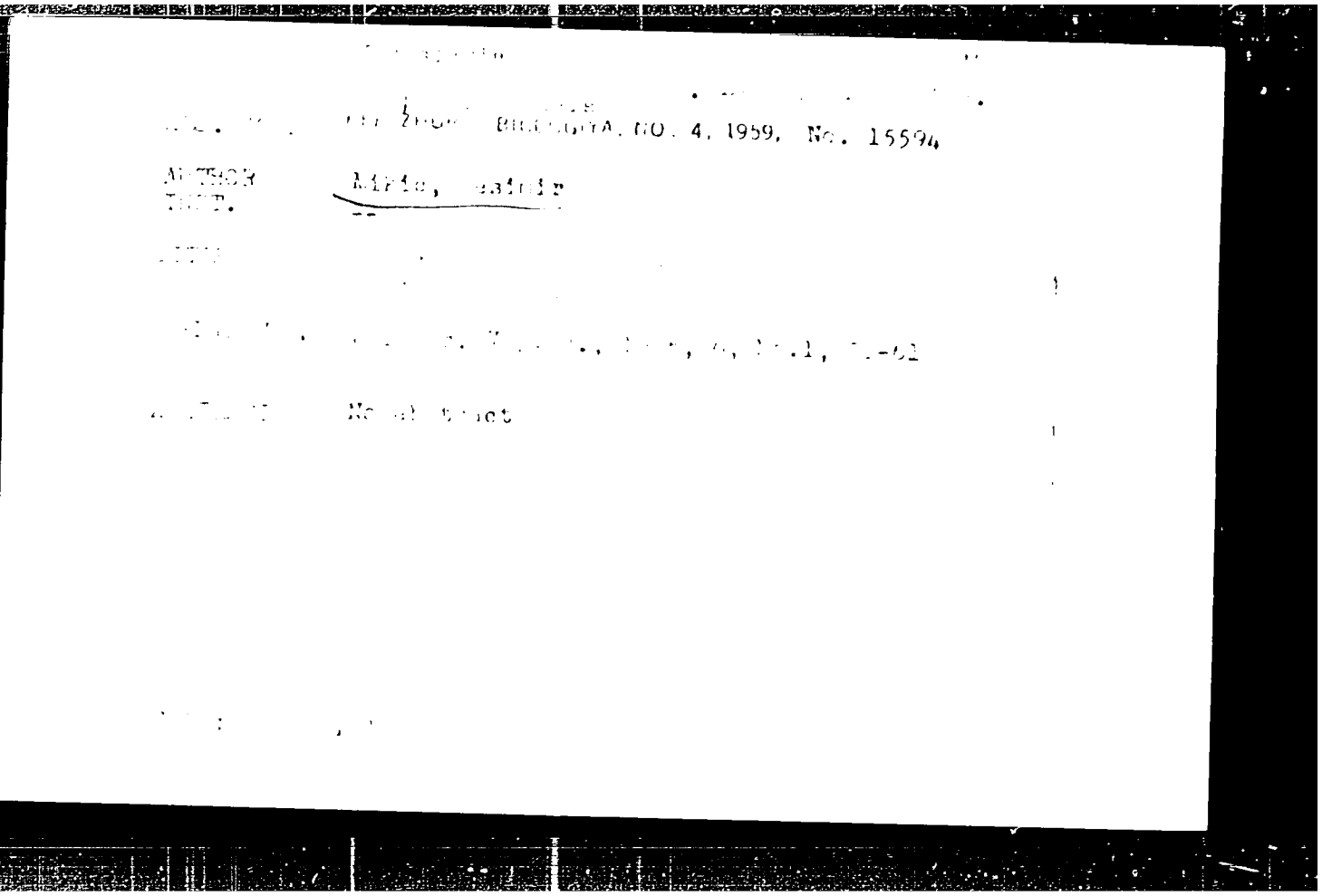

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"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R001134130002-6

MIKIC, E., dr.; [illegible], F., dr.

Systolic blood pressure in normal patients and nephritis patients. Jugoslavenska Fregl. 20 no.10:645-649 O '63.

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"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R001134130002-6

YUGOSLAVIA/Human and Animal Physiology -(normal and Pathological) T-4
Blood. The Forming Elements of Blood.

Abs Jour : Ref Zhur - Biol., No 11, 1958, 50665

Author : Mikic, F., Zavrnik, F.I.
Inst : -
Title : The Correlation Between Blood Forming Elements in Pigs.

Orig Pub : Veterinariya (Jugosl.), 1955, 4, No 1, 36-57.

Abstract : The Variability Coefficient (VC) of erythrocytes is 13 percent, of leukocytes (L) 20 percent, and of thrombocytes (T) 21 percent. Before feeding, the number of all cell forms decreases slightly. After feeding, however, the number of T rises, but not the number of L. It was established that there exists only a slight connection between the blood cells of the different centers of hemogenesis. The correlation of E/T is more pronounced than the correlation of L/T. The amounts of individual elements depend upon the activity of their genetic centers.

Card 1/2

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"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R001134130002-6

SKREB, Nikola (Zagreb); BIJELIC, Nada (Zagreb); MIKIC, Fedor (Zagreb)

Studies on the transfer of rat balstocysts. Biol glas 13 no.4: 359-369 '60.

1. Zavod za biologiju Medicinskog fakulteta, Institut za biologiju Sveucilista i Biostatisticki odjel Centralnog higijenskog zavoda, Zagreb. 2. Clan Urednistva, "Bioloski glasnik; Periodicum biologorum" (for Skreb).

(RATS)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R001134130002-6"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R001134130002-6

MIKIČ, F.

YUGO.

Application of statistical methods in analytical chemistry. Hercule Ivekovič and Fedor Mikič. Bull. intern. acad. yougoslave sci. et beaux-arts. Classe sci. math., phys. et tech. Livre 2, [N.S.] 2, 5-12(1949)(in French).—See C.A. 46, 9461g.

M. Plavšić

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R001134130002-6"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R001134130002-6

MIKIC, FEDOR

Mikić, Fedor. Table to calculate the coefficients in the logarithmic curve for solving the trend and other stochastical relations. Jugoslav. Akad. Znan. Umjet. Rasprave Odj. Mat. Fiz. Tehn. Nauke 1 (1952), no. 1, 11 pp. (1 insert). (Serb.-Croatian. English summary)

Coefficients of the logarithmic trend $y=a+bx+c \log x$ are computed by solving the normal equations. Many calculations needed for establishing these coefficients are reduced to less than one third by aggregates A, B, C, γ, E, F of basic sums tabulated in the appendix for $x=1, 2, \cdots, 100$. Examples of numerical computation schemes for the regression curves are given.

J. Janko.

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"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R001134130002-6

BUZINA, R., Dr.; HORVAT, A., Mr. ph.; MIKIC, F., Dr.; HORGAS, D.

Iodine and goiter; preliminary report. Higijena, Beogr. 7 no.1-4: 329-334 1955.

1. Centralni higijenski zavod, Zagreb; Biostatisticki laboratorij Savjeta za nar. zdravlje, Zagreb.

(GOITER, epidemiol.
endemic, eff. of iodine in water supply on incidence (Ser))
(IODINE,
in water supply, relation to incidence of endemic goiter (Ser))
(WATER SUPPLY
iodine content in relation to incidence of endemic goiter (Ser))

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"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R001134130002-6

MIKIC, Fedor

Vital forces of the population of the People's Republic of Croatia. Biol glas 13 no.2/3:159-273 '60.

1. Odsjek za biostatistiku Centralnog higijenskog zavoda u Zagrebu.

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R001134130002-6"

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HORVAT, Agneza; MIKIC, Fedor

Distribution of iodine in potable waters in Croatia. Biol glas 13 no.2/3:275-280 '60.

1. Odjel za higijenu prehrane i Odsjek za biostatistiku Centralnog higijenskog zavoda u Zagrebu.

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R001134130002-6"

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EMILI, N., dr (Rijeka); MIKIC, F., dr (Zagreb)

Is there poliomyelitis pathomorphosis in old age in the People's Republic of Croatia? Med.glasn. 14 no.5a:296-301 My '60.
(POLIOMYELITIS in old age)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R001134130002-6"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R001134130002-6

MIKIC, F.

Applications of correlations in medical sciences. Glas mat fiz Hrv 16 no.3/4:327-328 '61.

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"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R001134130002-6

TOMASIC, Pavao, dr.; MIKIC, Fedor, dr.; ZIVKOVIC, Roko, dr.

Resistance of leptospiral titers. Liječn. vjesn. 83 no.2:137-14[illegible] '61.

1. Iz Centralnog higijenskog zavoda u Zagrebu i Internog odjela Opće bolnice u Pakracu.
(LEPTOSPIROSIS diag)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R001134130002-6"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R001134130002-6

VODOPIJA, Ivan, dr.; BUJEVIC, Aldo, dr.; MADJARIC, Drago, dr.; MIKIC, Fedor, dr.; CVORIŠCEC, Tomislav, dr.

Determination of spreading of an epidemic with a rapid individual "filter" survey. Lijecn. vjesn. 83 no.12:1261-1267 '61.

1. Iz Zavoda za zdravstvenu zastitu grada Zagreba i NR Hrvatske, Skole narodnog zdravlja "Andrija Stampar" i Sanitarnog inspektorata NO grada Zagreba.

(HEALTH SURVEYS) (EPIDEMIOLOGY)

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"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R001134130002-6

MIKIC, Milana, dipl. fiz. hem. (Beograd, Osmana Dikica 8)

Possibility of substituting synthetic foil condensers for paper condensers. Tehnika Jug.Suppl.:Masinstvo 12 no.2:323-328 Fe '63.

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R001134130002-6"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R001134130002-6

YUGOSLAVIA/Microbiology - Microbes Pathogenic in Man and Animals. F.

Abs Jour : Ref Zhur - Biol., No 15, 1953, 67239

Author : Mikic, Mirjana

Inst : Institute of Hygiene.

Title : An Investigation of the Role of Shigell and of Conditionally Pathogenous Bacteria in Pathogenesis of Enterocolitis.

Orig Pub : Glasnik Hig. in-ta, 1956, 5, No 3, 17-32.

Abstract : According to the author's observations, in typical cases of severe bacterial dysentery the dysentery bacillus could be isolated in a pure, or almost pure, culture while the conditionally pathogenous intestinal bacteria were either not found at all or else were cultivated in the form of isolated colonies. In cases of severe

Card 1/3

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YUGOSLAVIA/Microbiology - Microbes Pathogenic in Man and Animals.

Abs Jour : Ref Zhur - Biol., No 15, 1958, 67239

enterocolitis several conditionally pathogenous bacteria (intestinal and para-intestinal bacilli, proteus, fecal alkali-former, blue puss bacillus, and enterococcus), were found in a pure or almost pure culture while the dysentery bacillus was either not isolated at all or else was encountered only accidentally. In the first case the dysentery bacillus must be regarded as the etiological factor causing the disease since it was isolated in a pure or almost pure culture; for the same reason, in enterocolitis the cause of the disease must be attributed to the conditionally pathogenous bacteria. The dysentery bacillus and the conditionally pathogenous bacteria were isolated both during interruptions of intestinal activity and in the absence of such interruptions. Both groups of bacteria behave like saprophytes in some circumstances (if there are only a few of them), and in other cases like

Card 2/3

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R001134130002-6

KRAJINOVIC, S.; MIKIC, M.; UDICKI, S.

Colicinogenic activity of Shigella species. Vojnosanit. pregl. 19 no.10:692-695 O '62.

1. Medicinski Fakultet u Beogradu, Epidemioloski institut Zavod za Zdravstevnu Zastitu Nrs, Bakteriolosko odeljenje.
(ANTIBIOTICS) (SHIGELLA)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R001134130002-6"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R001134130002-6

YU/0001/66/000/010/1805/1809

AUTHOR: Mikic, P. (Graduate engineer; Chief engineer Belgrade)

ORG: Development Section of the Joint Enterprise "Hemind" of the Chemical Industry, Belgrade (Sektor za razvoj Zdruzenog preduzeca hemijske industrije "Hemind")

TITLE: Production of plant protection chemicals in East Europe

SOURCE: Tehnika, no. 10, 1966, 1805-1809

TOPIC TAGS: pesticide, insecticide, fungicide, weed killer, production engineering, chemical research facility

ABSTRACT: A review is made of the production and research of plant protection chemicals in the USSR, East Germany, Poland, Czechoslovakia, Hungary, Rumania, and Bulgaria. The up-to-date selection of pesticides, insecticides, fungicides, and herbicides, and the total or itemized production figures for the years before 1963, inclusively, are given for each of the above-mentioned countries. The available names and locations of factories which produce a particular item and institutions which are doing research on the new products are listed. The production plans are detailed and directions of future development of pesticide industry are indicated for each of the countries. The 31 references are mostly from Communist sources. [JK]

1/1 UDC: 632.951:66(4-11)=861

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ACC NR: AP6032595 SOURCE CODE: YU/0001/66/000/010/1805/1809

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B

AUTHOR: Mikic, P. (Graduate engineer; Chief engineer Belgrade)

ORG: Development Section of the Joint Enterprise "Hemind" of the Chemical Industry, Belgrade (Sektor za razvoj Zdruzenog preduzeca hemijske industrije "Hemind")

TITLE: Production of plant protection chemicals in East Europe

SOURCE: Tehnika, no. 10, 1966, 1805-1809

TOPIC TAGS: pesticide, insecticide, fungicide, weed killer, ~~industrial~~ production engineering, ~~industrial [illegible], industrial program~~, research ~~program~~ facility chemical

ABSTRACT: A review is made of the production and research of plant protection chemicals in the USSR, East Germany, Poland, Czechoslovakia, Hungary, Rumania, and Bulgaria. The up-to-date selection of pesticides, insecticides, fungicides, and herbicides, and the total or itemized production figures for the years before 1963, inclusively, are given for each of the above-mentioned countries. The available names and locations of factories which produce a particular item and institutions which are doing research on the new products are listed. The production plans are detailed and directions of future development of pesticide industry are indicated for each of the countries. The 31 references are mostly from Communist sources. [JK]

SUB CODE: 06,07/ SUBM DATE: 27Dec65/ ORIG REF: 001/ OTH REF: 025/ SOV REF: 005/

Card 1/1 vmb UDC: 632.951:66(4-11)=861

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R001134130002-6

MIKIC, Zelimir, dr.

Considerations on the problem of personnel. Ii ezn. vjesn. 57 no.2:191-197 F '65.

1. Iz Centra zastite na radu Fabrike automobila u Priboju na Limu.

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"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R001134130002-6

ZDRAVKOVIC, A.; LEVI-JOVOVIC, E.; MIKIC-JOKOVIC, M.

Pathways of transmission of acute intestinal infections. Higijena 12 no.1:1-14 '60.
(COMMUNICABLE DISEASES transm)

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YUGOSLAVIA/Chemical Technology - Carbohydrates and Their Processing. H.

Abs Jour : Ref Zhur - Khimiya, No 16, 1958, 55435

Author : Mikiel'
Inst : -
Title : Sugars and Other Sweet Substances.

Orig Pub : Nova Trgovina, 1956, 9, No 10, 518-522.

Abstract : The following natural and synthetic substances are listed for the records of the science of staple commodities: honey, molasses, saccharin, and others, as well as their brief characteristics.

Card 1/1

12

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"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R001134130002-6

KACPROWSKI, Janusz; MIKIEL, Wladyslaw

Preliminary synthesis of Polish vowels by means of recurrently impulsed formant filters. Proceed vibr probl 4 no.1:27-41 '63.

1. Department of Vibrations, Institute of Basic Technical Problems, Polish Academy of Sciences, Warsaw.

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KACPROWSKI, J.; MIKIEL, W.; MARUCHIN, J.; LIPSKI, S.; BALTURKIEWICZ, Z.

Use of an acoustic analyzer of gas mixtures in the study of ether anesthesia of experimental animals. Acta physiol. pol. 14 no.1:135-144 '63.

1. Z Zakladu Badania Drgan Instytutu Podstawowych Problemow Techniki PAN w Warszawie Z Osrodka Ochrony Radiologicznej i Radiobiologii WIHE Kierownik: doc. dr J. Ryzewski.
(ETHER, ETHYL) (ANESTHESIA, INHALATION)
(EQUIPMENT AND SUPPLIES)

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