

KOSTAL, Karel, inz. dr.

"Encyclopedia of measurement, control, and automation."
Reviewed by Karel Kostal. Automatizace 7 no. 4: Supplement:
Technicka literatura insert Ap '64.

KOSTAL, Karel, dr.

"Units of electric and magnetic quantities" by S.F.Malinkov.
Reviewed by Karel Kostal. ~~El~~ tech obzor 51 no.1:53 Ja '62.

KOSTAL, K.

Kostal, K.

Method for fast harvesting of crops without losses. p. 226.

Vol. 5, no. 12, June 1955
MECHANISACE ZEMEDILSTVI

SO: Monthly List of East European Accession, (EEAL), LC, VOL. 4, No. 9,
Sept. 1955, Uncl.

KOSTAL, I.

"IN Memory Of The Academician P. D. Grekov." p. 157. (Za Socialistické
Zemselstvi. Vol. 3, No. 12, Dec. 1953, Praha.)

SO: Monthly List of East European Accessions, Vol. 3, No. 3,
Library of Congress, March 1954, Uncl.

KOSTAMANOV, G.M.

SENDERZON, E.M.; ~~KOSTAMANOV, G.M.~~

Tectonic elements and age relations of faults in the Kuznetsk
Basin. Trudy Lab.geol.ucl.no.6:526-536 '56. (MLRA 10:2)

1. Trest "Kuzbassugleppologiya."
(Kuznetsk Basin--Geology, Structural)

KOSTAMANOV, G.M.

Errors in determining the thickness of a coal bed by means of
boreholes. Razved.i okh.nedr. 22 no.8:30-33 Ag '56. (MLRA 9:11)

1. Trest Kusbassuglegeologiya.
(Coal geology) (Boring)

KOSTAMANOV, G.M.

132-12-11/12

AUTHOR: Butsik, Yu.V.

TITLE: Concerning G. M. Kostamanov's Article "The Errors in Determining the Thickness of Coal Bed in a Drill Hole"
(O stat'ye G.M. Kostamanova "O pogreshnosti pri opredelenii moshchnosti plasta uglya po skvazhine")

PERIODICAL: Razvedka i okhrana neдр, 1957, # 12, p 60 (USSR)

ABSTRACT: The author questions the correctness of the formula proposed by G.M. Kostamanov in the periodical "Razvedka i okhrana neдр", # 8, 1956. The author points out that Kostamanov did not take the coefficient k into consideration, without which the proposed correction of the magnitude of the coal layer according to the axis of the drill hole can not be carried out. The article contains one diagram.

ASSOCIATION: Voroshilovgrad Coal-Geology Trust (Trest Voroshilovgraduglegeologiya)

AVAILABLE: Library of Congress

Card 1/1

KOSTAN, G.

"Soils of the southern portion of the Ryazantsevskiy Rayon, Yaroslavl' Oblast, and their economic characteristics." Moscow Order of Lenin Agricultural Academy imeni K.A. Timiryazev. Moscow, 1956.
(Dissertation for the Degree of Candidate in Agricultural Science.)

So: Knizhnaya Letopis', No. 18, 1956

KOSTAL, R

3000

Košťál, R. Détermination des fréquences et des amplitudes des oscillations des éléments couplés non amortis.

Publ. Fac. Sci. Univ. Masaryk no. 300, 25 pp. (1948)
(Czech. French summary)

The author starts with n oscillators, the free motion of each of them being governed by an ordinary linear differential equation of the second order with constant coefficients. He then introduces into the system coupling of the most general type where the coupling terms may involve the displacements x , the velocities \dot{x} , and the accelerations \ddot{x} of the n particles ($r=1, \dots, n$). The system of differential equations governing the motion can be written in the Lagrangean form

$$\frac{d}{dt} \frac{\partial T}{\partial \dot{x}_r} - \frac{\partial (T-V)}{\partial x_r} + \frac{\partial F}{\partial \dot{x}_r} = 0,$$

where T is a quadratic form in the \dot{x} , plus a bilinear form in the x , and \dot{x} , V is a quadratic form in the x , and F is a quadratic form in the \dot{x} . He investigates the determinantal equation for the characteristic frequencies in particular when $F=0$, and specialises his result when each element is coupled with its next neighbours only. More special results are obtained for two oscillators with acceleration coupling, and for n identical oscillators when only next neighbours are coupled, and the coupling depends on displacements.

A. Erdélyi (Pasadena, Calif.)

Source: Mathematical Reviews,

Vol. 11 No. 3

[Handwritten signature]

ROSA, L.; HENK, L.
"Composing Calibrations By The Use Of Torison Penalties."
p. 147. (Pracc. Vol. 13, No. 239-250, 1951, Brno.)

SO: Monthly List of East European Accessions, Vol. 3, No. 3,
Library of Congress, March 1954, Uncl.

KOSTAL, R.

"Functions of a dispatcher in electric power distribution and the organization of his duties." Energetika, Praha, Vol. 4, No. 7, July 1954, p. 303.

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

KOSTAL, Rostislav

Elektrina. (Electricity; a university textbook. 1st ed.) For the students of the Faculty of Architecture and Building. Prague, SNTL, 1957. 134 p.

Bibliografický katalog, CSR, Česke knihy, No. 33. 24 Sept 57. p. 710.

KOSTAL, R

Properties of Motion Composed of Two Nondamped Oscillations in the Same Direction
With Equal Amplitudes 21

✓ Košťál, Rostislav. Les propriétés du mouvement composé
de deux oscillations non amorties de la même direction
et avec des amplitudes égales. Práce Brn. Českoslov.
Akad. Věd 29 (1957), 277-301. (Czech. Russian and
French summaries) 2

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1/1

KOSTAL, R.

"Properties of a movement composed of two parallel undamped oscillations with equal amplitudes."

p. 277 (Prace) Vol. 69, no. 6, 1957
Prague, Czechoslovakia

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

KOSTAL, R.

"Gravity, mass of inertia, and force."

p. 302 (Prace) Vol. 69, no. 6, 1957
Prague, Czechoslovakia

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

KOSTAL, Rostislav

Commemorating the 80th birthday of professor Josef Zahradnicek.
Pokroky mat fys astr 7 no.2:113-114, '62.

KOSTAL, Rostislav; HOREJS, Jiri; VEJSADA, Frantisek; LEPIL, Oldrich;
PECINA, Vaclav; LAITICH, Miroslav; VESELY, Frantisek;
KLEIN, Tomas

The activities of the Association of Czechoslovak Mathematicians
and Physicists. Pokroky mat fyz astr 7 no.4:252-258
'62.

KOSTAL, Rostislav

Third course for the teachers of physics in secondary schools.
~~Physics in secondary schools~~ no. 3: 180-181. '63.

KOSTAL, Rudolf; SCHMIDT, Erik

Program of measures taken by the Central Administration of Power Engineering for increasing the economical use of electric power in the national economy. Energetika Cz 14 no.11:540-542,543 N '64.

1. Central Administration of Power Engineering, Prague.

KOSTAL, Rudolf

National results of the control of electric power consumption,
and precautions for the winter season 1962/1963.
Energetika Cz 12 no.10:535-538 0 '62.

1. CED, Praha.

KOSTAL, Rudolf

Reduction of working time and introduction of the two shift system
in enterprises, and making full use of the equipment in power plants.
Energetika Cz 11 no.6:295 Je '61.

L 16603-65 EWP(j)/EWP(t)/EWP(b) Pc-4 JD/RM
ACCESSION NR: AP4047115

Z/0034/64/000/010/0754/0754

AUTHOR: Kostal, V. (Engineer); Cempa, S. (Engineer); Semoda, J. (En-
gineer)

TITLE: Continuous-casting device¹⁵ for metals and thermosetting
plastics. No. 136-61 ^B

SOURCE: Hutnicke listy, no. 10, 1964, 754

TOPIC TAGS: continuous casting, metal casting, plastic casting,
tube casting. 18

ABSTRACT: This Czechoslovak patent introduces a method of continu-
ously casting tubular billets, according to which the billet is
lifted from the mold at such a rate that the still-liquid central
portion of the billet remains in the mold, leaving the tube surface
smooth and shiny.

ASSOCIATION: none

Card 1/2

L 16603-65

ACCESSION NR: AP4047115

0

SUBMITTED: 22Apr63

ENCL: 00

SUB CODE: IE,MM

NO REF SOV: 000

OTHER: 000

ATD PRESS: S147

Card 2/2

ACCESSION NR: AP4018064

Z/0034/64/000/003/0227/0227

AUTHOR: Kostal, V. (Engineer); Cempa, S. (Engineer)

TITLE: Method of electrolytic refining of impure raw antimony

SOURCE: Hutnické listy, no. 3, 1964, 227

TOPIC TAGS: electrolytic antimony refining, copper, lead, nickel, cobalt, precious metal, fluoridized electrolyte, tissue diaphragm, electropositive metal, anti-corrosion cathode

ABSTRACT: The invention concerns the refinement of impure raw antimony containing 0.5 to 5% copper, 2 to 20% lead, a maximum of 0.5% nickel and cobalt, 0.5 to 10% iron, as well as precious metals and platinum metals, into antimony of high purity from fluoridized electrolyte. The electrolytic process is conducted in electrolyzers with separate electrode spaces by means of a tissue diaphragm, in a closed cycle of refinement of the electrolyte from the more electropositive metals than antimony by cementing with powdered antimony, which is maintained in suspension or in the eddy layer. Anti-corrosion acid-resistant cathodes are used.

Card 1/1

L 34944-66 EWP(t)/ETI IJP(c) JD/JG

ACC NR: AP6026606

SOURCE CODE: CZ/0057/65/000/012/0538/0540

AUTHOR: Kostal, Vaclav (Engineer); Cempa, Stefan (Engineer)

23

ORG: ZSNP, Ziar nad Hronom

B

TITLE: Recovery of precious metals from domestic antimony concentrates

SOURCE: Hutnik, no. 12, 1965, 538-540

TOPIC TAGS: antimony compound, gold, silver, metal extracting

ABSTRACT: The concentrate containing 3 grams of gold and 26 grams of silver per ton was treated by oxidizing roasting, reduction melting, and electrolytic refining; anode sludges containing 430 to 485 grams of gold and 3474 to 4435 grams of silver per ton were obtained. The recovery of Au was 72-76%, of Ag 64.5%. The sludges offer an excellent raw material for metal recovery. The antimony concentrates were mined at the following locations in Slovakia: Poproc, Pezinok, Dubrava, Cucma. Orig. art. has: 3 tables.

[JPRS: 34,519]

SUB CODE: 11, 07 / SUBM DATE: none / ORIG REF: 005 / SOV REF: 001
OTH REF: 002

Card 1/1

L 38597-66 T/EWP(t)/ETI IJP(c) DS/JD

ACC NR: AP6027704

SOURCE CODE: CZ/0034/66/000/001/0042/0047

AUTHOR: Kostal, Vaclav (Engineer); Compa, Stofan (Engineer)30
BORG: SNP Factory, Ziar nad Hronom (Zavody SNP)TITLE: Production of pure antimony from domestic materials contaminated with copper

SOURCE: Hutnicko listy, no. 1, 1966, 42-47

TOPIC TAGS: metal extracting, antimony, copper containing alloy, electrolytic refining, metallurgic process

ABSTRACT: There are 3 ways in which the copper content may be reduced. A pyrometallurgical process of molten antimony using trivalent antimony sulphide and sulfur at 800 to 1000°C; leaching of antimony concentrates by a solution of NaCN in an alkaline medium; electrolytic refining in acid electrolytes of the sulfate-hydrogen fluoride type. This last process gave good results in experimental application. The antimony product contained 0.01-0.03% Cu, 0.001-0.005% Fe, 0.002% Pb, 0.001% S, traces of Ni and Zn. The raw antimony used for the electrodes had 79-86% Sb, 1-4.6% Cu, 1.2-5% Pb, 5% Fe. Orig. art. has: 2 figures and 3 tables. [JPRS: 34,519]

SUB CODE: 11 / SUBM DATE: none / ORIG REF: 008 / SOV REF: 003

OTH REF: 002

Card 1/1

UDC: 669.75

SIMEK, Antonin; KOSTAL, Zd., inz.

Experience with pre-emergent herbicides in maize. Agrochem 2 no.2:
36-42 '62.

1. Oddeleni karanteny a ochrany rostlin, Ustredni kontrolni a skusebni
ustav zemedelsky, Praha.

JANDA, Lubor, doc., inz., CSc.; ~~KOSTALEK, Bohuslav, inz.~~

Example of a concrete skeleton factory structure; example of a
storied frame construction with mushroom floors. Poz stavby
11 no.7:373-376 '63.

KOSTALIK, J.

"Fighting erosion and improvement of the fertility of the eroded soils of Ukraine." Reviewed by J. Kostalik. Geogr cas SAV 16 no.1:101-103 '64

L 31787-66

ACC NR: AP6021648

SOURCE CODE: CZ/0084/65/000/004/0301/0318

AUTHOR: Kostalik, Jan

30

ORG: none

B

TITLE: Contribution to the study of soil erosion in the land-registry territory of Bojnicky and Dvorniky

SOURCE: Geograficky casopis, no. 4, 1965, 301-318

TOPIC TAGS: soil, geographic survey, cartography, soil behavior

ABSTRACT: On the basis of an analysis of the physico-geographical conditions of the western part of the Nitrianska hill-country, the article presents the results gained by studying the manifestations of surface and gully erosion and a cartographical representation. The soil erosion was investigated both quantitatively and qualitatively, using the results of laboratory analyses. Gully erosion was studied historically and geographically and evaluated on the basis of a detailed study of the eroded areas. Orig. art. has: 13 figures and 4 tables. [Based on author's Eng. abst.] [JPRS]

SUB CODE: 08 / SUBM DATE: none / ORIG REF: 022 / SOV REF: 022

ORIG REF: 019

13
Card 1/1

GRINBERG, A.A.; KOSTAL'SKIY, A.A.; RYVKIN, S.M.

Excitation of ultrasonic vibration in germanium by current pulses.
(Thermoacoustic vibrations). Zhur. tekhn. fiz. 35 no.2:376-380 F
'65. (MIRA 18:4)

SEDLAK, K.; KOSTAN, Josef

Socialist work brigades. Elektrotechnik 17 no.9:272 S '62.

1. Ceskomoravska-Kolben-Danek Praha, zavod Slevarny II (for
Kostan).

MASLOVSKIY, Yevgeniy Aleksandrovich; ABRAMOV, Sergey Kuz'mich;
KOSTAMAROV, Vadim Mikhaylovich, nauchn. red.; DOLGOVA,
K.N., red.

[Deep drainage; practices in 25 years' operation of
vertical drainage with siphon drains] Glubokii drenazh;
opyt 25-letnei ekspluatatsii vertikal'nogo drenazha s
sifonnyim vodootvodom. Moskva, Stroizdat, 1964. 129 p.
(MIRA 18:1)

KOSTANASHVILI, N. I.

56-6-43/47

AUTHORS: Varsimashvili, T. V. , Kostanashvili, N. I.

TITLE: The Transition Effect of the "Stars" in a Lead Absorber
(Perekhodnyy effekt "zvezd" v svintsovom poglotitele)

PERIODICAL: Zhurnal Eksperimental'noy i Teoreticheskoy Fiziki, 1957, Vol. 33,
Nr 6 (12), pp. 1530 - 1531 (USSR)

ABSTRACT: The present paper contains the results of a controlling experiment carried out for the purpose of observing the transition effect of the "stars" under a lead absorber by means of photographic emulsions. The plane lead absorbers were arranged one on top of the other. Each lead layer had a dimension of 40 x 60 cm². The photographic emulsions were located separately between the lead absorbers. Exposure took place in an altitude of 3100 m above (sea level). The results obtained are shown in form of a diagram, according to the curve of which the maximum of the transition effect amounts to 30 %. This transition effect is only weak on the peaks of mountains and amounts, according to data obtained from various authors, only to 15 - 30 %. Experimental results are noticeably influenced by the nature of the process and by the quality of evaluation. The authors evaluated one and the same volume of the photo emulsion three

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21(8)

SOV/56-36-4-6/70

AUTHORS: Kostanashvili, N. I., Shakhulashvili, O. A.

TITLE: Generation of "Strange" Particles in the Interaction of Protons With Energies of 9 BeV With Photoemulsion Nuclei (Generatsiya "strannykh" chastits pri vzaimodeystvii protonov s energiyey 9 BeV s yadrami fotoemul'sii)

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, 1959, Vol 36, Nr 4, pp 1006-1011 (USSR)

ABSTRACT: The first of the two authors was transferred to the OIYaI by Tbilisskiy gosudarstvennyy universitet (Tbilisi State University), and the second by the Institut fiziki AN Gruzinskoy SSR (Physics Institute, AS Gruzinskaya SSR). They report on investigations carried out by them at the Laboratoriya vysokikh energiy Ob'yedinennogo instituta yadernykh issledovaniy (High-energy Laboratory of the United Institute of Nuclear Research) concerning the dependence of the frequency of the generation of strange particles on the energy of primary particles. The emulsion chamber consisting of 100 layers of the emulsion BR-450, was subjected to the action of a 9 BeV proton beam on the synchrotron of the OIYaI. The chamber had a volume of

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SOV/56-36-4-6/70

Generation of "Strange" Particles in the Interaction of Protons With Energies of 9 Bev With Photoemulsion Nuclei

$(10 \times 10 \times 4.5) \text{ cm}^3$. A short description is given in the introduction of the experimental method and of experimental conditions. The following recordings were made by the authors:

Total number of tracing rays	670
Rays without visible effects in stopping	494
Strange particles	6

π^+ -mesons	19
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Number of secondary interactions	53
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Number of rays extending beyond the chamber	94
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For the ratio $N_{\Sigma, K} / N_{\pi^+} \approx 1/3$ was found, whereas in reference 3

the value $\approx 1/10$ was obtained. Whereas for the star production cross section of 9 Bev protons on NIKFI emulsion nuclei (Refs 4,5) the value ~ 460 mb was found, the authors measured a cross section of $\sigma_{\Sigma, K} \approx 20$ mb for the production of slow strange particles.

Further details concerning these investigations are given by two tables. Table 1 contains data concerning a number of heavy mesons observed (14 K^+ , two τ^+ and one K^- -particle), and table 2 contains data on observed primary hyperons and

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Generation of "Strange" Particles in the Interaction of Protons With Energies of 9 Bev With Photoemulsion Nuclei

secondary charged pions. The data show that the majority of the strange particles flies off into the front half-space, but all pions flying off as a result of Σ -decay do so in the backward direction (in the c.m.s.). For all Σ -hyperons originating from a reaction of the kind (1): $P + N \rightarrow \Sigma + K + N$ the kinetic energies and the departure angles were measured (diagram in figure 2). For hyperon production two possibilities offer themselves:

- a) by any secondary particle, e.g. a pion, which enters into interaction with the nucleons of the parental nucleus, and
- b) in reactions of the kind (1). Actually, both possibilities are realized; Σ^-K^+ pair production takes place according to the scheme $\pi + N \rightarrow \Sigma + K$ (2). For reaction (2) figure 3 shows the analogous diagram as figure 2. Figure 4 shows the diagram for the Λ^0 -particles from reactions of the type $P + N \rightarrow \Lambda^0 + K + N$. The Λ^0 -particles flew off at such large angles as 133° and 152° . The authors finally thank M. I. Podgoretskiy for supervising work, V. I. Veksler and M. Ya. Danysh for taking part in discussions, and they further thank Z. P. Golovina, T. A. Zhuravleva, A. M. Kucher, T. N. Mikheyeva and N. A. Protsenko for assisting

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SOV/56-36-4-6/70

Generation of "Strange" Particles in the Interaction of Protons With Energies of 9 Bev With Photoemulsion Nuclei

in the work of measuring and surveying as well as in evaluating results. There are 4 figures, 2 tables, and 7 references, 3 of which are Soviet.

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

SUBMITTED: September 20, 1958

Card 4/4

86895

S/056/60/039/005/011/051
B029/B077

24.6900
AUTHORS:

Dzhanelidze, L. P., Kopylova, D. K., Korolevich, Yu. B.,
~~Kostanashvili, N. I.~~, Mandritskaya, K. V., Petukhova, N. I.
(Deceased), Podgoretskiy, M. I., Tuvtendorzh, D.,
Shakhulashvili, O. A., Chzhen Pu-in

TITLE:

Formation of Charged Hyperons During Interactions of 9-Bev
Protons With Nuclei of a Photoemulsion

PERIODICAL:

Zhurnal eksperimental'noy i teoreticheskoy fiziki, 1960,
Vol. 39, No. 5(11), pp. 1237-1241

TEXT: The authors investigated the angular distribution of positive and negative pions formed in decays of Σ^+ hyperons formed in their turn by the interaction of 9-Bev protons with photoemulsion nuclei. The authors irradiated two emulsion chambers: $(10 \cdot 10 \cdot 6)\text{cm}^3$ (chamber 1), and $(10 \cdot 15 \cdot 4)\text{cm}^3$ (chamber 2). These chambers consist of BR-400НИКФИ (BR-400 NIKFI)-type emulsion layers. 9-Bev protons of the proton-synchrotron of the Laboratoriya vysokikh energiy OIYaI (High-energy Laboratory of the Joint Institute of Nuclear Research) were used to bombard the

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Formation of Charged Hyperons During Interactions of 9-Bev Protons With Nuclei of a Photoemulsion S/056/60/039/005/011/051
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emulsions. Angular distribution of the decay products of Σ^+ hyperons: V. G. Solov'yev (Ref. 2) has already emphasized the importance of investigating the longitudinal asymmetry found in the angular distribution for pions formed during a hyperon decay. Fig. 1 shows the angular distribution of pions relative to its direction of motion in the rest system of the hyperon; the authors paid special attention to the calculation of these values. If the angular distribution is approximated by

$1 + a \cos \theta^*$, then the coefficient of asymmetry has the form $a \equiv \alpha \bar{P}_\Sigma$
 $= \frac{3}{N} \sum_{i=1}^N \cos \theta_i^* + \left(\frac{3 - a^2}{N} \right)^{1/2} = 0.03 \pm 0.2$; α denotes the coefficient of asymmetry for total hyperon polarization, \bar{P}_Σ the vector component of the mean Σ hyperon polarization in the direction of motion, θ_i^* the angle between the directions of emission of hyperon and pion in the rest system of the hyperon, and N the number of hyperons observed. The following holds for the angular distribution of pions relative to the production level of Σ hyperons: $b = 2(N_{\text{forward}} - N_{\text{backward}}) / (N_{\text{forward}} + N_{\text{backward}}) = 0.36 \pm 0.22$.

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Formation of Charged Hyperons During Interactions S/056/60/039/005/011/051
of 9-Bev Protons With Nuclei of a Photoemulsion B029/B077

Fig. 2 shows the angular distribution of Σ^{\pm} hyperons with necessary corrections. The ratio of the number of positive and negative hyperons is $N_{\Sigma^+}/N_{\Sigma^-} = 3.2 \pm 0.1$. All black and gray tracks were investigated in 76 stars which displayed decaying stars according to the mode $\Sigma^{\pm} \rightarrow \pi^{\pm} + n$. Four pair productions of a Σ^{\pm} hyperon and a K^{\pm} meson, two pair productions of K^+ and K^- mesons, and a production of two hyperons in a single star were found. A star of the type (17 + 7p) had two gray particles which decay into a relativistic particle during motion. This particle might have been a hyperon. The annihilation of one antiproton was observed in the extension of the selected rays. The authors thank E.L. Andronikashvili and V. I. Veksler for their interest, and the operators of the synchrotron and all laboratory assistants for taking part in the evaluation of the photoemulsions. There are 4 figures and 6 Soviet references. ✓

ASSOCIATION: Ob'yedinennyy institut yadernykh issledovaniy (Joint Institute of Nuclear Research). Institut fiziki Akademii nauk Gruzinskoy SSR (Institute of Physics, Academy of Sciences Gruzinskaya SSR). Tbilisskiy gosudarstvennyy universitet (Tbilisi State University)

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FORMATION OF CHARGED HYPERONS DURING INTERACTIONS S/056/60/039/005/011/051
OF 9-BEV PROTONS WITH NUCLEI OF A PHOTOEMULSION B029/B077
SUBMITTED: July 9, 1960

86895

S/048/62/026/006/007/020
B125/B112

AUTHORS: Dzhanelidze, L. P., Kostanashvili, N. I., Lebedevich, G. I.,
Mandritskaya, K.V., and Shakhulashvili, O. A.

TITLE: Transverse momenta of charged Σ^+ -hyperons produced by 9-Bev
protons in a photoemulsion

PERIODICAL: Akademiya nauk SSSR. Izvestiya. Seriya fizicheskaya, v. 26,
no. 6, 1962, 734 - 736

TEXT: The Σ -hyperons were produced by irradiating a photoemulsion of
type БР-400 НИКФИ (BR-400 NIKFI) in the inner 9-Bev proton beam of the
ОИЯИ synchrocyclotron. The emulsion chamber consisted of hundred
emulsion layers. After 22000 tracks had been evaluated, 42 Σ -hyperons
were chosen. 30 Σ -hyperons were chosen under similar conditions at the
ОИЯИ. A certain "weight" is attributed to each Σ -hyperon. The cases
chosen were identified by comparing the measured ionization and its
multiple Coulomb scattering. The maximum of the distribution of the
transverse momenta extending up to $p_{\perp} = 600$ Mev/c is at 300 - 400 Mev/c.

From this spectrum $\langle p_{\perp} \rangle = (327 \pm 14)$ Mev/c is inferred for the mean value

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KOSTANASHVILI, N.I.; LEBEDEVICH, G.I.; MANDRITSKAYA, K.V.; SHAKHULASHVILI,
O.A. ; DZHANELIDZE, L.P.

Transverse momentum of charged Σ^- -hyperons generated by 9 Bev.
protons in a photographic emulsion. Soob. AN Gruz. SSR 30 no.5:
553-557 My '63. (MIRA 16:11)

1. Institut fiziki AN GruzSSR, Tbilisi. Predstavleno akademikom
E.L.Andronikashvili.

DZHANELIDZE, L.P.; KOPYLOVA, D.K.; KOROLEVICH, Yu.B.; ~~KOSTANASHVILI, N.I.~~;
MANDRITSKAYA, K.V.; PETUKHOVA, N.I. [deceased]; PODGORETSKIY, M.I.;
TUVDENDORZH, D.; SHAKHULASHVILI, O.A.; CHZHEN PU-IN [CHEN P'U YING]

Production of charged hyperons by 9 Bev. protons interacting with
nuclei of photo emulsion. Zhur.eksp.i teor.fiz. 39 no.5:1237-1241
N '60. (MIRA 14:4)

1. Ob'yedinennyy institut yadernykh issledovaniy, Institut fiziki AN
Gruzinskoy SSR i Tbilisskiy gosudarstvennyy universitet.
(Mesons) (Protons) (Photography, Particle track)

AUTHORS: Oterin, D. and Kostanda, L. SOV/130-58-6-18/20

TITLE: Dissemination of Advanced Practice (Propaganda peredovogo opyta)

PERIODICAL: Metallurg, 1958, Nr 6, p 36 (USSR).

ABSTRACT: The authors give a brief account of efforts made at the Stalingrad Metallurgical Works to keep workers and staff abreast of the latest developments in iron and steel production. In addition to talks by personnel of the work (e.g. Kharagirlo and Shcherbin) and official lectures (160 in 1957) frequent visits are paid by groups to neighbouring works and also to others in the USSR. Detailed studies are made of the working methods of particularly successful operators (Samoylev, Zhernov and Derevyanko are named) and technical information bulletins produced at the works as well as technical literature are widely disseminated. Works' personnel are given opportunities of improving their qualifications, and a museum showing

Card 1/2

Dissemination of Advanced Practice

SOV/130-58-6-12/20

the growth of the works since its foundation in 1872 has been provided.

ASSOCIATION: Stalinskiy metallurgicheskiy zavod
(Stalino Metallurgical Works)

Card 2/2

1. Metallurgy - USSR 2. Employee relations

25(1), 28(1)

SOV/118-59-9-13/20

AUTHOR: Geyer V.G., Doctor of Technical Sciences, Professor, and Kostanda V.S., Engineer

TITLE: Hydraulic Lifting of Pulp by Air-Lifting and Coal-Suction Air-Lifting Installations

PERIODICAL: Mekhanizatsiya i avtomatizatsiya proizvodstva, 1959, Nr. 9, pp 52-56 (USSR)

ABSTRACT: At the present time, almost all hydro-shafts are using centrifugal pumps for lifting coal-rock pulp. There are many advantages in applying this method: the feed of pulp from the face to the concentrating factory is performed without reloading, the lifting process is simple, and its efficiency is satisfactory. However, this method can be applied only where the lifting height is under 250 m, otherwise several successively connected pumps are required. In such cases, it is more expedient to apply a coal-suction air-lifting device (Fig. 1). This method permits the lifting of pulp to a height of 600 m and more; its efficiency can be regulated within broad limits by changing the pressure and

Card 1/3

SOV/118-59-9-13/20

Hydraulic Lifting of Pulp by Air-Lifting and Coal-Suction Air-Lifting Installations

volume of the air entering the air-lift. Due to diminishing of the working gear number through which the pulp passes, there will be less coal breakage. In case where the pulp is delivered to the shaft by gravity feed, air-lifting installation can be applied (Fig 2). Advanced features of this installation are: Absence of moving parts; reduced coal breakage; possibility of lifting large pieces of coal (by applying pipelines of 30-40 cm in diameter, 15-20 cm large coal pieces can be transported); possibility of an automatic output change. The air compressors are installed on the surface, which permits using the most economical synchronized machines, raising safety of operations and reducing the number of accidents. The efficiency of a coal-suction lifting device is a comparatively stable value equal to 0.36, while the general efficiency of an air-lift installation is 0.58. At the Donetskii Industrial Institute, research of operating conditions for air-lifting and coal-suction air-lifting installations had been carried out. It was

Card 2/3

SOV/118-59-9-13/20

Hydraulic Lifting of Pulp by Air-Lifting and Coal-Suction Air-Lifting Installations

established that both installations can work with high pulp concentrations (Solids : Liquid = 1 : 1.5). The maximum size of coal pieces could amount to 0.5 of the smallest section of the air-lift pipeline. There are 3 graphs, 2 tables and 3 diagrams.

Card 3/3

RYSIN, N.G., inzh.; KOSTANDA, V.S., inzh.

Coal-suction airlift system. Ugol' Ukr. 5 no.5:33 My '61.
(MIRA 14:5)
(Hydraulic conveying)

KOSTANDI, F.F.

AID P - 5433

Subject : USSR/Aeronautics - airdrome maintenance

Card 1/1 Pub. 135 - 10/31

Author : Kostandi, F. F., Eng.-Col., Kand. of tech. sci.

Title : To use more extensively the experience of outstanding personnel of engineering and airdrome service.

Periodical : Vest. vozd. flota, 1, 47-52, Ja 1957

Abstract : How to meet the requirements for maintaining the airdromes in good order for flying activities, particularly in winter, is discussed by the author in this article. Six photos, 1 diagram. The article merits attention.

Institution : None

Submitted : No date

USSR/Radio Transmitters
Keying systems

Feb 1947

"Keying Transmitters," G. G. Kostandi (UAIAA)

"Radio" Vol XX, No 2

Discussion of necessary fundamental conditions
for satisfactory operation of transmitters.
Schemes of Keying also discussed and illustrated.

9T37

KOSTANDI, G.

PA 22/49T91

USSR/Radio Equipment
Frequency Changers

Oct 48

"Converter and Attachment," G. Kostandi, 2½ pp

"Radio" No 10

Describes (1) short-wave converter, and (2)
long-wave attachment stabilized by quartz.
Includes four photographs, and schematic two
circuit diagrams.

LC

22/49T91

KOSTANDI, G.

USSR/Radio - Receivers, Short-Wave
Adapter

Nov 51

"A Tubeless Short-Wave Converter (Adapter),"
G. Kostandi (UAI1A)

"Radio" No 11, pp 47-49

Soviet short-wave enthusiasts are making in-
creasing use of the 21-Mc band, but many short-
wave receivers owned by radio clubs and individual
amateurs do not have this band. Kostandi has
designed a simple adapter to permit reception
of amateur stations working the 21-Mc band. The

209T73

USSR/Radio - Receivers, Short-Wave
(Contd)

Nov 51

converter makes use of a crystal mixer (an
ordinary silicon detector taken from a Komsomolets
crystal receiver).

209T73

KOSTANDI, G.

USSR/Electronics - Radio
Transmitters

Mar 52

"A Club FM/AM Transmitter," G. Kostandi

"Radio" No 3, pp 23-28

Describes club FM/AM transmitter for which G. Kostandi and V. Komylevich received a 1st class diploma and a 3d prize at the 9th All-Union Radio Exhibition. States that the design is quite complex and therefore the transmitter should be constructed only by groups of amateurs who are experienced in transmitter work.

229T63

KOSTANDI G.

238T66

USSR/Electronics - Ultrashort Waves
Antennas

Apr 52

"An Ultrashort-Wave Antenna (Shown at the Ninth
All-Union Radio Exhibition)", G. Kostandi, VAIIA
[call no]

"Radio" No 4, pp 31-33

Describes an antenna for amateur USW stations
(85-87 Mc) which has horizontal polarization and
a circular radiation pattern. The antenna con-
sists of a "Braude tourniquet antenna", which

238T66

has two crossed folded dipoles fed at points
which are 90° out of phase. The phase shift is
created by a quarter-wave stub which connects
the dipoles.

238T66

KOSTANDI, G.

USSR/Electronics - Exhibitions
Adapters, USW
Jul 52

"An Ultrashort-Wave Adapter (Shown at the 10th
All-Union Exhibition)", "G. Kostandi V. Yakovlev,
Leningrad

"Radio" No 7, pp 43-47

Describes 2 types of adapters, one line-operated
and one battery-operated, which will permit re-
ception of amateur ultrashort-wave stations op-
erating in the 85-87 Mc band when used with ei-
ther a short-wave receiver having a spread 20-m

22679

amateur band or a spread 25-m broadcast band or any
other receiver having a short-wave band continuous
from 10 to 12 Mc.

22679

KOSTANDI, G.

235T55

USSR/Electronics - Television
FM Broadcasting

Oct 52

"An Ultrashort-Wave Adapter for the KVN-49 Television Receiver," Ye. Dryzgo, G. Kostandi

"Radio" No 10, p 37

Television stations can be used for FM broadcasting when they are not telecasting. The T-1 Moskvich, T-2 Leningrad, and T-1 Leningrad television receivers are equipped to receive such broadcasts. Describes an oscillator adapter unit for the KVN-49 which makes possible the reception of FM broadcasts.

235T55

~~KOSMOS~~ SPIZHEVSKIY, I.I., redaktor; TARASOV, F.I., redaktor;
LARIONOV, G.Ye, tekhnicheskii redaktor

[Ultrahigh-frequency attachments] Ul'trakerstkovolnovye pristavki.
Pod red. I.I.Spishevskogo. Moskva, Gos. energ. izd-vo, 1953. 14 p.
(Massovaya radiobiblioteka, no. 178) (MLRA 8:3)
(Radio, Short wave)

KOSTANDI, G., (Leningrad); KOMAROV, G., (Leningrad),

Ultra-short wave FM radio receiver set made of the parts of a "Moskvich."
Radio no.7:40-42 JI '53. (MLRA 6:7)
(Radio, Short wave--Receivers and reception)

DRYZGO, Ye.; KOSTANDI, G.

Ultra-short wave FM signal generator. Radio no.9:22-23 S '53. (MLR 6:8)
(Radio, Short wave--Apparatus and supplies) (Radio frequency modulation)

KOSTANDI, G.

USSR/Electronics - Radio Receivers
Ultrashort-Waves

Oct 53

"Constructing Circuits of Combined [AM/FM/USW] Radio
Receivers," G. Kostandi, V. Khevrolin

Radio, No 10, pp 28-31

Author proposes standards for ultrashort-wave re-
ceivers regarding frequency, selectivity, and sensi-
tivity. Discusses selection of circuit components
for FM receivers, use of reflex circuits, and gives
7 block diagrams of combined AM/FM/USW circuits.

276T25

KOSTANDI, G.

Quartz calibrator. Radio no.10:42-43 0 '53.

(MLRA 6:10)

(Radio, Short wave--Receivers and reception) (Radio measurements).

KOSTANDI, G. G. LEVENSTERN I. I.

"Design of Combined Receivers for Microwaves," Tr. Vses. N. -i. in-ta radioveshchat. priyema i akustiki, No 1, 1954 pp 35-50

Basic parameters of combined radio receivers for FM microwave signals are described. Schematic diagrams for modernization of these receivers are analyzed. The advantages of shot detectors for reception of FM signals are indicated.

RZhFiz, No 3, 1955

USSR/ Electronics - Radio receivers

Card 1/1 Pub. 89 - 13/27

Authors : Kostandi, G., and Yakovlev, V.

Title : A combined AM and FM receiver

Periodical : Radio 2, 26-29, Feb 1954

Abstract : A 7-tube super-heterodyne radio receiver is described. The set operates on the following four frequency ranges: 150 - 410 Kc ; 520 -600 Kc ; 4.0 - 13.5 Mc and 64 -76 Mc. Circuit diagrams; drawings.

Institution:

Submitted:

KOSTANDI, G.

USSR/Electronics - Generators

Card 1/1

Authors : Kostandi, G.; and Yakovlev, V.
Title : A crystal noise generator
Periodical : Radio, 3, 30 - 31, Mar, 1954
Abstract : The article gives a general idea about crystallic diodes and their use; an exemplary circuit, and a general and inside view of the generator are given.
Institution :
Submitted :

KOSTANDI, G.
USSR/Electronics

Card 1/1

Authors : Kostandi, G., Levenstern, I. and Shteyert, L.

Title : Devices for Tuning Ultrashort-Wave Receivers

Periodical : Radio. 5, 57 - 61, May 1954

Abstract : The article describes several instruments used for regulating or tuning ultrashort-wave receiver units, and radio-outlet point adapters. The following equipment is described and the related circuit diagrams are shown: 1) a quartz oscillator for medium-frequency wave control; 2) an ultrashort-wave quartz oscillator; 3) a wide-band USW amplifier, and 4) a USW piezoelectric oscillator. The article also gives the description and the block diagram of the distribution network, indicating the position of points to be tested and tuned. Diagrams; tables.

Institution :

Submitted :

KOSTANDI, Georgiy Georgiyevich
KOSTANDI, Georgiy Georgiyevich; TARASOV, F.I., red.; VORONIN, K.P.,
tekhn.Red.

[Homemade ultrashortwave units and receivers] Samodel'nye ul'tra-
korotkovolnovye pristavki i priemniki. Moskva, Gos.energ.isd-vo,
1955. 39 p. (Massovaya radiobiblioteka, no.221) (MIRA 11:2)
(Radio, Short wave—Receivers and reception)

KOSTANDI, K.

A Combined AM/FM Receiver. In Radio Engineering, No. 2:36 Feb 55

KOSTANDI, G.

USSR/ Electronics - Triode amplifiers

Card 1/1 Pub. 89 - 19/30

Authors : Kostandi, G., and Levenstern, I.

Title : Triode amplifiers for meter waves

Periodical : Radio 3, 38 - 39, Mar 1955

Abstract : The technical factors involved in the amplification of short waves are analyzed, particularly, in reference to the use of triodes in the amplification of meter waves, the triode having been found to possess less sound of its own and high input resistance. The layouts of the circuits, grounding and other points are explained. Diagrams; table.

Institution :

Submitted :

KOSTANDI, G. [G.]

USER/ Electronics - Frequency converters

Card 1/1 Pub. 89 - 16/28

Authors : Kostandi, G., and Levenstern, I.

Title : Metric wave frequency converters

Periodical : Radio 4, 29-30, Apr 1955

Abstract : A description is presented of several types of pentode and triode grid converters used as metric-wave frequency converters in heterodyne receiver sets. Circuit diagrams.

Institution :

Submitted :

KOSTANDI, G.

USSR/Electronics - Signal generators

Card 1/1 Pub. 89 - 25/27

Authors : Kostandi, G., and Shteyert, L.

Title : Universal UHF AM/FM signal generator

Periodical : Radio 8, 57-59, Aug 1955

Abstract : Description is given of a simple and sufficiently compact UHF signal generator which permits tuning and control of the UHF channel of combination radio receivers and the audio channel of TV-sets. The principle circuit diagram, parts arrangement and mode of operation of the universal UHF AM and FM signal generator are described. Table; diagram; illustrations.

Institution :

Submitted :

Radioelektronika - Frequency Converter

RU-0000

Card 1/1 No. 1-4/5

Author : Levenstern, I. I., and Kostandi, G. G., Active Members, (VNORIE)

Title : Metric-wave triode frequency converter

Periodical : Radiotekhnika, 13, 29-35, Jun 55

Abstract : Optimum variants for metric-wave triode frequency converter circuits which satisfy the rigid requirements of a modern radio receiver are discussed. The triode frequency converter, built in the form of a double bridge, has the advantages of high transfer ratio, low voltage leak, and low noise factor. The two best frequency converter circuits for operation in the ultrahigh-frequency range (60-80 megacycles), are those with the induction bridges and those with the capacitance bridge coupled to the grid circuit. Double triodes with separate cathode leads were used in this experiment. The calculated values for the transfer ratio of the two frequency converter circuits were compared with the experimental values and were found to be in good agreement. Graphs.

Institution : All-Union Scientific and Technical Society of Radio Engineering and Electric Communications imeni A. Popyov (VNORIE)

Submitted : June 16, 1954

KOSTANDI, Georgiy Georgiyevich; YAKOVLEV, V.V.

[Ultrashortwave receivers for amateurs] UKV Priemniki dlia
liubitel'skoi svyazi. Moskva, Gos.energ.izd-vo, 1958. 31 p.
(Massovaia radiobiblioteka, no.302) (MIRA 12:11)
(Radio, Shortwave--Receivers and reception)

KOSTANDI, Georgiy Georgiyevich; YAKOVLEV, Valeriy Vladimirovich;
LOMANOVICH, V.A., red.; BQRUNOV, N.I., tekhn.red.

[UHF radio receivers for amateur radio communication] UKV pri-
emniki dlia liubitel'skoi svyazi. Izd.2. Moskva, Gos.energ.
izd-vo, 1960. 31 p. (Massovaya radiobiblioteka, no.367).

(Radio, Shortwave--Receivers and reception) (MIRA 13:12)

SADOV, F.I., prof.; KALININA, K.G., dotsent; Primali uchastiye:
SHESTERNINA, P., studentka; KOSTANDI, L.A., student

Role of surface active agents in the dyeing of acetate rayon
fabrics with dispersed dyes. Tekst.prom. 21 no.9:51-53 S '61.
(MIRA 14:10)

1. Moskovskiy tekstil'nyy institut.
(Dyes and dyeing—Rayon)
(Surface-active agents)

KOSTANDI, M., arhitektori; SIPKO, A., arhitektori

Vilnius. Zhil.stroi. no.7:24-25 JI '60.
(Vilnius--Apartment houses)

(MIRA 13:7)

KOSTANDI, M., arkhitektor; SIPKO, A., arkhitektor

Tashkent. Zhil. stroi. no.9:22-24 S '60. (MIRA 13:9)
(Tashkent--Apartment houses)

KOSTANDI, M., arkhitektor; SIPKO, A., arkhitektor

Novosibirsk. Zhil. stroi. no.11:24-26 N '60. (MIRA 13:11)
(Novosibirsk--Apartment houses)

KOSTANDOV, E. A., Aspirant

"Disruption of Cortical Dynamics, Especially of the Joint Action of the First and Second Signal Systems, During Schizophrenia." Cand Med Sci, Inst of Higher Nervous Activity, Acad Sci USSR, 17 Sep 54. (VI, 7 Sep 54)

SC: Sum 432, 29 Mar 55

KOSTANDOV, Ye.A.

Disorders in the neurodynamics and particularly in the interaction of
the cortical signal systems in paranoid schizophrenia. Trudy Inst.
vys.nerv.deiat. Ser.patofiziol. 1:26-47 '55. (MLRA 9:8)
(SCHIZOPHRENIA) (CONDITIONED RESPONSE)

USSR/Medicine - Neuropathology, Psychiatry

FD-2797

Card 1/1

Pub 154-18/19

Author : Kostandov, E. A.

Title : Scientific conference on questions of sleep therapy

Periodical : Zhur. vys. nerv. deyat. 5, 299-303, Mar-Apr 1955

Abstract : Gives an account of the Scientific Conference on Questions of Sleep Therapy, as used in neuropathologic and psychiatric clinics, held at the end of 1954 at the Institute of Higher Nervous Activity of the Academy of Sciences USSR. Summarizes reports given by the following participants: A. G. Ivanov-Smolenskiy, L. I. Kotlyarevskiy (Inst of Higher Nervous Activity of Acad Sci USSR), M. M. Aleksandrovskaya (Inst of Higher Nervous Activity of Acad Sci USSR), A. O. Dolin (Inst of Obstetrics and Gynecology of the Ministry of Health USSR), N. A. Kryshova (Inst of Physiology imeni I. P. Pavlov, Acad Sci USSR), L. I. Aleksandrova (Inst of Neurology, Acad Med Sci USSR), Yu. A. Povorinskiy (Inst of Psychiatry imeni Bekhterev, Lenin-grad), M. I. Seredina (Inst of Higher Nervous Activity, Acad Sci USSR), O. V. Kerbikov (2nd Moscow Medical Institute), D. Ye. Melekhov (Inst of Psychiatry of the Ministry of Health RSFSR), and I. V. Strel'chuk (Inst of Higher Nervous Activity, Acad Sci USSR).

~~KOSTANDOV, H.A.~~

Impairment of the joint activity of the first and second signal systems in the catatonic form of schizophrenia. Trudy Inst.vys. nerv. delat. Ser.patofiziol. 5:101-120 '58 (MIRA 11:12)
(CONDITIONED RESPONSE)
(SCHIZOPHRENIA)

KOSTANDOV, E.A.

Comparative characteristics of disturbances of cortical dynamics in
paranoid and catatonic forms of schizophrenia. Trudy Inst. vys.
nerv. delat. Ser. patofiziol. 7:5-11 '60. (MIRA 14:4)
(SCHIZOPHRENIA)

KOSTANDOV, E.A.

Disturbances in the neurodynamics of schizophrenics with the
Clerambault-Kandinsky syndrome. Trudy Inst. vys. nerv. deiat.
Ser. patofiziol. 7:12-18 '60. (MIRA 14:4)
(SCHIZOPHRENIA) (HALLUCINATIONS AND ILLUSIONS)

KOSTANDOV, E.A.

Disturbance in the higher nervous activity of patients with involuntional depression. Trudy Inst. vys. nerv. deiat. Ser. patofiziol. 7:81-94 '60. (MIRA 14:4)

(DEPRESSION, MENTAL) (CONDITIONED RESPONSE) (NERVOUS SYSTEM)

KOSTANDOV, E.A.

Disorders in the analysis and synthesis of complex stimuli in patients with involuntional depression. Zhur. vys. nerv. deiat. 10 no.2:189-194 Mar-Apr '60. (MIRA 14:5)

1. Institute of Higher Nervous Activity, U.S.S.R. Academy of Sciences, Moscow
(DEPRESSION, MENTAL) (CONDITIONED RESPONSE)

KOSTANDOV, E.A.

Pathodynamic structure and disorders of the interaction between
the cortex and subcortex in reactive states. Prob.sud.spikh.10
127-132'61. (MIRA 16:7)

(BRAIN--DISEASES) (PSYCHIATRIC RESEARCH)

KOSTANDOV, E.A.

Changes on the correlation of the orientation and motor conditioned reflexes under the effect of atropine. Zhur. vys. nerv. deiat. 14 no.2:211-222 Mr-Ap '64. (MIRA 17:6)

1. Tsentral'nyy nauchno-issledovatel'skiy institut sudebnoy psikiatrii im. Serbskogo, Moskva.

KOLYANDOV, N.A.

Role of disorders in corticofugal influences in pathology of the orientating reflex in schizophrenia patients. Zhur. vys. nerv. psiat. 13 no.6:995-1009 N-D '63. (MIRA 17:7)

1. Tsentral'nyy nauchno-issledovatel'skiy institut sudebnoy psikiatrii imeni Serbskogo.

KOSTANDOV, E.A.

Changes in cortical and subcortical interactions under the
effect of aminazine. Zhur. vys. nerv. deiat. 14 no. 3: 397-405
Iy. Je '64. (MIRA 17:11)

1. Serbsky Central Research Institute of Forensic Psychiatry,
Moscow.

KOSTANDOV, L.L.

Effect of adrenaline on the nervous mechanisms of the orienting reflex. Zhur.vyb.nerv.delat. 14 no.6:975-983 N.B. '54.

(MIRA 18-6)

1. Tsentral'nyy nauchno-issledovatel'skiy institut sudebnoy psikhiatrii im. V.P.Sarbskogo, Moskva.

L 54623-65 EWT(1)/EWA(j)/EWA(b)-2/T BW/RO

ACCESSION NR: AP5017955

UR/0246/64/064/009/1348/1355

AUTHOR: Kostandov, E. A.

TITLE: Effect of carbocholine on the nervous mechanisms of the orientation reflex

SOURCE: Zhurnal nevropatologii i psikhiiatrii, v. 64, no. 9, 1964, 1348-1355

TOPIC TAGS: electroencephalography, nervous system drug, psychoneurotic disorder, brain, neurology

Abstract: The effect of carbocholine has been studied on 36 schizophrenic patients with apathico-aboulie syndrome, in a state usually defined as effective. The duration of the disorder in most of the patients was more than 5 years. Ten persons undergoing examination in the institute were selected for the controls, in whom no signs of disturbances of psychic activity were found. The investigated functions were recorded on a sixteen-channel pen-recording electroencephalograph. The biocurrents of the cerebral cortex were picked up monopolarly, symmetrically from both sides from the frontal, temporal, and occipital regions. Also recorded was an electrooculogram, an electromyogram from the forearm muscles, and EKG, respiration, a skin-galvanic response, a plethysmogram of the heat (temple area) and hands (fingers). A tone from the VG-12

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L 54823-65

ACCESSION NR: AP5017955

generator with a frequency of 1,000 cps and loudness 60-65 decibels above the level of normal audibility served as the stimulus, along with indifferent and situational (with respect to the situation of conflict) words, spoken by the experimenter into a microphone. In almost all cases (34 out of 36) more or less pronounced changes in bioelectrical, autonomic, and motor functions were observed against a background of carbocholine action. Carbocholine induces changes in the autonomic functions. In almost all patients intensified sweating was observed, along with a slowing down of the pulse rate by 4-20 beats per minute, while changes in respiration and reduction in amplitude of pulse beats on the plethysmogram were somewhat less frequently observed. Respiration usually quickened or became uneven, arrhythmic. Carbocholine also intensified motor activity. This usually was expressed by the manifestation or intensifying of the general muscular tonus of the patient, recorded on the EEG in the form of muscular artifacts, and also in an appreciable quickening of the intersignal movements of the head and eyeballs, and by shuddering of the entire body. The use of a cholinergic agent, (carbocholine) induced in half of the patients intensified tonic activating effects of the reticular formation of the brainstem on the cortex, which was expressed on the EEG in diffuse desynchronization of cortical potentials. In addition, in some cases carbocholine also strengthened the supplementary activities of

Card 2/3

L 54823-65

ACCESSION NR: AP5017953

the cortex when subjected to sound or verbal stimuli. Therefore, the resulting experimental data clearly shows that in some cases weakening of tonic or supplementary -- upon efferent stimulations -- ascending activating influences of the reticular formation of the brainstem on the cortex depends to a definite extent on disturbances of the cholinergic mechanism of the activating system.

Orig. art. has 2 figures.

ASSOCIATION: Tsentral'nyy nauchno-issledovatel'skiy institut sudebnoy psikhologii im. Serbskogo, Moscow (Central Scientific Research Institute of Forensic Psychiatry)

SUBMITTED: 15Jun63

ENCL: 00

SUB CODE: PH, IS

NO REF SOV: 006

OTHER: 009

JPRS

AR
Card 3/3

L 60971-65 EWP(k)/EWP(h)/EWT(d)/EWA(d)/EWP(l)/EWP(v) Pf-4

ACCESSION NR: AP5018281

UR/0314/65/000/007/0007/0009
621.512

16
B

AUTHOR: Bershadskiy, S. A. (Engineer); Zaytsev, D. A.; Kostandov, K. A. (Engineers)

TITLE: A high pressure gauge for compressors

SOURCE: Khimicheskoye i neftyanoye mashinostroyeniye, no. 7, 1965, 7-9

TOPIC TAGS: ultrahigh pressure gauge, ¹⁴high gas-pressure gauge, quartz piezoelectric gauge

ABSTRACT: The authors constructed a new very-high-pressure piezoquartz gauge which can register pressures from 0 to 500 kg/cm², has a sensitivity of $8 \cdot 10^{-13}$ Coul/kg/cm², a time constant of 30 sec, and an insulation resistance at 20C of 10^{13} ohm; the sensing element of the gauge weighs 115 g. The article describes its construction, presents the calibration and registration curves, and describes its general operation. Orig. art. has: 4 figures.

ASSOCIATION: None

SUBMITTED: 00

ENCL: 00

SUB CODE: IE

NO REF SOV: 004

OTHER: 000

Card 1/1
1/1

KOSTANDOV, L.A.

Technical progress in the nitrogen industry. Khim.nauka i prom. 1
no.6:602-605 '56. (MLRA 10:3)

1. Nachal'nik Glavnogo upravleniya azotney promyshlennosti.
(Nitrogen industries)

KOSTANDOV, L.A.

Means for meeting the needs of agriculture in mineral fertilizers.
Khim. prom. no.1:1-4 Ja-P '57. (MLRA 10:4)
(Fertilizers and manures)

CARD 1/3

VERSION OF METHANE FROM COKE GAS WAS DISCOVERED IN CONNECTION WITH THE DISCOVERY OF LARGE OCCURRENCES OF NATURAL GAS IN THE NORTHERN PARTS OF THE CAUCASUS, ON THE