

ZELEVINSKAYA, M.K.

USSR

Branch, Central Inst. Epidemiology and Microbiology, (-1944-)

"Active immunization against gas gangrene (B. Perfringens)."

Zhur. Mikrobiol., Epidemiol., i Immunobiol., Nol 9, 1944

ZELEVINSKAYA, N.G.

DIKUSHIN, V.I., akad., otv. red.; SHUMILOVSKIY, N.N., red.; ZASLAVSKIY, Yu. S., red.; TATOCHENKO, L.K., red.; VERKHOVSKIY, B.I., red.; NAZAROV, S.T., red.; PETRENKO, L.I., red.; *ZELEVINSKAYA, N.G.*, red.; BELYANIN, P.N., red. izd-va.; POLENOVA, T.P., tekhn. red.

[Machine and instrument manufacture; proceedings of the conference]
Mashinostroenie i priborostroenie; trudy konferentsii. Moskva, Izd-vo Akad. nauk SSSR, 1958. 358 p. (MIRA 11:12)

1. Vsesoyuznaya nauchno-tekhnicheskaya konferentsiya po primeneniyu radioaktivnykh i stabil'nykh izotopov i izlucheniya v narodnom khozyaystve i nauke. Moscow, 1957.
(Radioisotopes--Industrial applications)
(Metals)

ZELEVINSKAYA, N.G.

~~LATYSEV, G.D.~~

176

PHASE I BOOK EXPLOITATION SOV/5410

Tashkentskaya konferentsiya po mirnomu ispol'zovaniyu atomnoy energii, Tashkent, 1959.

Trudy (Transactions of the Tashkent Conference on the Peaceful Uses of Atomic Energy) v. 2. Tashkent, Izd-vo AN UzSSR, 1960. 449 p. Errata slip inserted. 1,500 copies printed.

Sponsoring Agency: Akademiya nauk Uzbekskoy SSR.

Responsible Ed.: S. V. Starodubtsev, Academician, Academy of Sciences Uzbek SSR. Editorial Board: A. A. Abdullayev, Candidate of Physics and Mathematics; D. M. Abdurasulov, Doctor of Medical Sciences; U. A. Arifov, Academician, Academy of Sciences Uzbek SSR; A. A. Borodulina, Candidate of Biological Sciences; V. N. Iyashov; G. S. Ikramova; A. Yo. Kiv; Yo. M. Lobanov, Candidate of Physics and Mathematics; A. I. Nikolayev, Candidate of Medical Sciences; D. Nishanov, Candidate of Chemical Sciences; A. S. Sadykov, Corresponding Member, Academy of Sciences USSR, Academician, Academy of Sciences Uzbek SSR; Yu. N. Talanin,

Card 1/20

176

Transactions of the Tashkent (Cont.)

SOV/5410

Candidate of Physics and Mathematics; Ya. Kh. Turakulov, Doctor of Biological Sciences. Ed.: R. I. Khamidov; Tech. Ed.: A. G. Babakhanova.

PURPOSE : The publication is intended for scientific workers and specialists employed in enterprises where radioactive isotopes and nuclear radiation are used for research in chemical, geological, and technological fields.

COVERAGE: This collection of 133 articles represents the second volume of the Transactions of the Tashkent Conference on the Peaceful Uses of Atomic Energy. The individual articles deal with a wide range of problems in the field of nuclear radiation, including: production and chemical analysis of radioactive isotopes; investigation of the kinetics of chemical reactions by means of isotopes; application of spectral analysis for the manufacturing of radioactive preparations; radioactive methods for determining the content of elements in the rocks; and an analysis of methods for obtaining pure substances. Certain

Card 2/20

176

Transactions of the Tashkent (Cont.)

SOV/5410

instruments used, such as automatic regulators, flowmeters, level gauges, and high-sensitivity gamma-relays, are described. No personalities are mentioned. References follow individual articles.

TABLE OF CONTENTS:

RADIOACTIVE ISOTOPES AND NUCLEAR RADIATION
IN ENGINEERING AND GEOLOGY

Lobanov, Yp. M. [Institut yadernoy fiziki UzSSR - Institute of Nuclear Physics AS UzSSR]. Application of Radioactive Isotopes and Nuclear Radiation in Uzbekistan 7

Taksar, I. M., and V. A. Yanushkovskiy [Institut fiziki AN Latv SSR - Institute of Physics AS Latvian SSR]. Problems of the Typification of Automatic-Control Apparatus Based on the Use of Radioactive Isotopes 9

Card 3/20

12

- Transactions of the Tashkent (Cont.) SOV/5410
- Borukhov, M. Yu., and A. T. Lebedev [Institute of Nuclear Physics AS UzSSR]. A Unified Radioactive Isodromic Regulator (URIR) 29
- Borukhov, M. Yu., and B. K. Mal'tsev [Institute of Nuclear Physics AS UzSSR]. Experimental Application of High-Sensitivity Gamma-Relay 32
- Betin, Yu. P., B. I. Verkhovskiy, N. G. Zelevinskaya, and V. V. Yalushin [Fizicheskiy institut Akademii Nauk USSR - Physics Institute AS USSR]. Methods for Increasing the Accuracy of Measurements of Radioactive Radiation Flux 36
- Snisarenko, A., Z. Tarasova, Ye. Nepomnyashchiy, and V. Novopol'skiy [Nauchno-issledovatel'skiy institut shinnoy promyshlennosti-Scientific Research Institute of the Tire Industry]. Determination of the Wear of Car Tires by Means of Isotopes 43
TL²⁰⁴
- Arkhangel'skiy, A. A., and G. D. Latyshev [Institute of Nuclear
Card 5/20

24.6700

S/048/62/026/005/001/022
B102/B104

AUTHORS: Guseva, V. V., Dobrotin, N. A., Zelevinskaya, N. G.,
Kotel'nikov, K. A., Lebedev, A. M., and Slavatskiy, S. A.

TITLE: Experimental data on nucleon-nucleon interactions at ~ 100 Bev
and their interpretation

PERIODICAL: Akademiya nauk SSSR. Izvestiya. Seriya fizicheskaya, v. 26,
no. 5, 1962, 549 - 557

TEXT: Experimental data on NN-interactions, obtained by a team of the
Laboratory of Cosmic Rays of the Physics Institute AS USSR at its Pamir
station (3860 m), are discussed. Photographs of such interactions revealed
the presence of showers with asymmetric particle emission in the c.m.s.
Of 48 showers, 18 showed marked asymmetry. The data obtained with the
arrangement shown in Fig. 1 were evaluated by conventional statistical
methods and also by the Monte-Carlo method. It is shown that the probabili-
ty of asymmetric showers being caused by fluctuations in the meson angular
distribution does not exceed some per cent. The fact that the shower
symmetry depends on the inelasticity ratio of the interacting nucleons

Card 1/3

Experimental data on...

S/048/62/026/005/001/022
B102/B104

allows NN-interactions to be divided into three classes: (1) symmetric showers with small and approximately equal coefficients of inelasticity K_{lab} and K_{mirror} ; (2) asymmetric showers with very different coefficients; and (3) symmetric showers with both coefficients being large ($K > 0.4$). It is explicitly shown that the experimental results can be interpreted with the aid of a simple structural model of interactions for the above classes: (1) peripheral-- peripheral interactions; (2) peripheral - central interactions; and (3) central - central interactions. In collisions of class (2), for example, the periphery of one nucleon is assumed to interact with the center of the other. The data obtained also show that an excited meson cloud appears in ~ 100 Bev NN-collisions, which does not contain the colliding nucleons. In general, this cloud moves slowly relative to the c.m.s., and decomposes isotropically when its temperature reaches a value $T \sim \mu_{\pi}$. The "spectrum" of the radiation or energy distribution of the mesons is comparable with that of an absolutely black body. There are 12 figures. 1/B

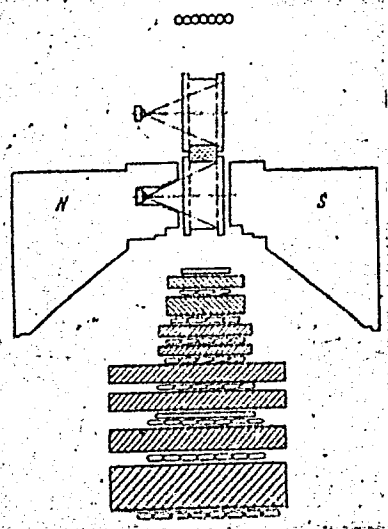
ASSOCIATION: Laboratoriya kosmicheskikh luchey Fizicheskogo instituta im. P. N. Lebedeva Akademii nauk SSSR (Laboratory of Cosmic Rays of the Physics Institute imeni P. N. Lebedev of the Academy of Sciences, USSR)

Card 2/3

Experimental data on...

S/048/62/026/005/001/022
B102/B104

Fig. 1



JB

Card 3/3

21.5300 (2816,1033,1138)

S/120/60/000/006/005/045
E032/E514AUTHORS: Betin, Yu.P., Verkhovskiy, B. I., Zelevinskaya, N.G.
and Yakushin, V. V.TITLE: A Method for Increasing the Accuracy of Measurement of
the Intensity of Radioactive Emission

PERIODICAL: Pribory i tekhnika eksperimenta, 1960, No.6, pp.23-27

TEXT: The principle of the method is as follows. The radiation detector is irradiated both by the radiation under investigation (intensity n_n) and the radiation from a standard source (intensity n_k). The total electrical signal produced in the detector under the action of the two radiations is fed into a common electronic device at the output of which two signals are separated out. The magnitude of one of them (U_1) is proportional to the sum of the two intensities and the magnitude of the second (U_2) is proportional to the standard intensity only. The signal U_1 is used to determine the intensity of the radiation under investigation, whilst the signal U_2 is used in the automatic control of the readings and their correction. The automatic correction of the readings is carried out by measuring the ratio U_1/U_2 . In order to be able to separate out the signals U_1 and U_2 at the Card 1/4

86731

S/120/60/000/006/005/045

E032/E514

A Method for Increasing the Accuracy of Measurement of the Intensity of Radioactive Emission

output of the device, the magnitude of the control beam of radiation is periodically varied. The block diagram of the instrument is shown in Fig.1. The detector 1 is irradiated from the left by the radiation under investigation and from below by the control beam due to the additional source S_k . The control beam is modulated with a frequency ω_0 using a rotating absorber as shown in Fig.1. If the intensity of the control beam follows the law $n_k(t) = n_k(1 + \sin \omega_0 t)$, then the signal at the anode of the photomultiplier^{or} across the load resistance of the ionization chamber, is of the form $U = U_M + U_k(1 + \sin \omega_0 t)$. The constant component $U_M + U_k$ is thus proportional to the sum of the two intensities, while the amplitude of the variable component U_k is proportional to the intensity of the control beam. The total signal U is fed into a dynamic capacitor 2 in which it is transformed into an alternating signal with a frequency $\omega_1 \gg \omega_0$ and is then amplified by the main amplifier 3. The amplifier is followed by a linear detector 4 which produces at its output the constant voltage

Card 2/4

86731

S/120/60/000/006/005/045
E032/E514

A Method for Increasing the Accuracy of Measurement of the Intensity of Radioactive Emission

$U_1 = (U_M + U_k) k k_1'$, where k is the product of the voltage transformation coefficient of the dynamic capacitor α and the amplification coefficient of the amplifier 1, and k_1' is a coefficient depending on the parameters of the detector. The component of the signal having a frequency ω_0 leaves the detector 4 into the amplifier 5 which is followed by a further detector 6; the latter isolates the constant voltage $U_2 = U k k_1'' k_2$, where k_H is the amplification coefficient of the amplifier 5 and k_1'' and k_2 depend on the parameters of the detectors 4 and 6. The voltages U_1 and U_2 are fed into the electronic potentiometer 7, which is connected in such a way that its amplifier sees the difference between U_1 and a fraction of U_2 , which is applied to the rheochord of the potentiometer. The potentiometer is so arranged that its indications satisfy the condition

$$U_1/U_2 = r/R = p \quad (1)$$

where R is the resistance of the rheochord and r is a fraction

Card 3/4

86731

S/120/60/000/006/005/045
E032/E514

A Method for Increasing the Accuracy of Measurement of the Intensity of Radioactive Emission

of this resistance which feeds the amplifier of the potentiometer. The ratio r/R is shown directly by the potentiometer. It is shown that changes in the parameters of the detector of the radiation, the dynamic capacitor and the main amplifier have no effect on the measurements. Details are given of the basic circuits involved and some experimental tests performed with the apparatus. There are 4 figures and 2 Soviet references.

ASSOCIATION: Fizicheskiy institut AN SSSR (Physics Institute AS USSR)

SUBMITTED: September 26, 1959

Card 4/4

L 4477-66 EWT(1)/EWT(m)/FCC/I/EWA(h) IJP(c) GW

ACC NR: AP5024619

SOURCE CODE: UR/0048/65/029/009/1627/1630

AUTHOR: Dobrotin, N.A.; Zolevinskaya, N.G.; Kotel'nikov, K.A.; Maksimenko, V.K.; Puchkov, V.S.; Slavatskiy, S.A.; Smorodin, Yu. A.

28
QB

ORG: none

TITLE: Phenomenological picture of secondary particle production in nucleon interactions at hundreds and thousands of BeV. /Report, All-Union Conference on Cosmic Ray Physics held at Apatity 24-31 August 1964/

SOURCE: AN SSSR. Izvestiya. Seriya fizicheskaya, v. 29, no. 9, 1965, 1627-1630

TOPIC TAGS: primary cosmic ray, secondary cosmic ray, pi meson, high energy particle, particle production

ABSTRACT: The authors briefly review the experimental data on secondary particle production by primary cosmic rays. The inelastic interaction cross section is practically constant for energies from 20 to 10^5 BeV, and the inelasticity is constant and equal to 0.4-0.5 for energies up to 10^4 BeV. About 90% of the secondaries are pions. Two production mechanisms are distinguished: fireball production, and production and decay of excited nucleons (isobars). Most of the secondaries are produced by the fireball mechanism. In the hundred BeV range there is a reference system in which the pions are emitted isotropically. In this system the pion energy distribution can be represented, except for a high-energy tail, by a Bose-Planck function for a temperature of 0.7-1.0

Card 1/2

09010321

L 4477-66

ACC NR: AP5024619

pion masses. In the thousand BeV region there are indications that two or more fireballs may be produced. The high-energy tail on the pion energy distribution is ascribed to decay of highly excited isobar states. It is shown that the exponents in the atmospheric energy spectra of nuclear-active particles and of high-energy photons (ascribed to pion decay) are very nearly the same. From this it is concluded that the energies of the high-energy pions are proportional to the energies of the primaries producing them. Only a few (one or two) high energy pions are produced in each interaction, and these carry 10-20 % of the incident particle energy. It is anticipated that counter installations now under construction will provide more accurate data on both pion production mechanisms in the thousand VeV range. Orig. art. has: 6 formulas, 2 figures, and 1 table.

SUB CODE: NP/ SUBM. DATE: 00/ ORIG REF: 007/ OTH REF: 009

PC
Card 2/2

L 4463-66 EWT(1)/EWT(m)/FCC/T/EWA(m)-2/EWA(h) GW

ACC NR: AP5024622 SOURCE CODE: UR/0048/65/029/009/1640/1643

AUTHOR: Zelevinskaya, N.G.; Maksimenko, V.M.; Slavatskiy, S.A.; Sokolovskiy, V.V.

ORG: none 23
23

TITLE: On the angular distribution of secondaries in elementary multiple production events at high energies /Report, All-Union Conference on Cosmic Ray Physics held at Apatity 24-31 August 1964/

SOURCE: AN SSSR. Izvestiya. Seriya fizicheskaya, v. 29, no. 9, 1965, 1640-1643

TOPIC TAGS: primary cosmic ray, secondary cosmic ray, nucleon interaction, inelastic interaction, pi meson, particle production

ABSTRACT: The authors have calculated the distribution to be expected for elementary multiple production events with respect to the absolute difference between the numbers of forward and backward secondaries on the assumptions that energy, momentum, and charge are conserved, that all the secondaries are ultrarelativistic pions, and that the probability for any possible distribution of momentum among the secondaries is proportional to the corresponding volume of phase space. The details of this calculation are not discussed, but the results are presented and are compared with the observed distribution for multiple production events of multiplicity 4 or greater. Many more highly asymmetric events are observed than are predicted by the calculation, and it is concluded that statistical factors cannot account for the asymmetry of multiple

Card 1/2

09010427

L-4463-66

ACC NR: AP5024622

production. One must take account of the asymmetry of multiple production when investigating the energy dependence of different features of the process. In particular, the apparent energy dependence of the inelasticity found by W. Fretter and L. Hansen (Phys. Rev., 118, 812, 1960) and by I. Kita and G. Fujioka (J. Phys. Soc. Japan, 16, 1099, 1107, 1961) can be accounted for in terms of an energy independent inelasticity and an asymmetric multiple production process. Orig. art. has: 6 formulas, 2 figures, and 1 table.

SUB CODE: NP/ SUBM DATE: 00/.. . . . ORIG REF: 003/ OTH REF: 003

OC
Card 2/2

GUSEVA, V.V.; DOBROTIN, N.A.; ZELEVINSKAYA, N.G.; KOTEL'NIKOV, K.A.;
LEBEDEV, A.M.; SLAVATINSKIY, S.A.

Experimental data on nucleon-nucleon interactions at energies
in the hundred Bev. range and their interpretation. Izv. AN
SSSR. Ser. fiz. 26 no. 5: 549-557 Ap '62. (MIRA 15:5)

1. Laboratoriya kosmicheskikh luchey Fizicheskogo instituta
im. P.N. Lebedeva AN SSSR.
(Nuclear reactions) (Collisions (Nuclear physics))

ZELEVINSKAYA, N.G., KOTELINKOV, K.A., LEBEDEV, A.M., SLAVATINSKY, S.A.,
DOBROTIN, N.A., and GUSEVA, V.V.

"Experimental Data on Nucleon-Nucleon-Interaction at the Energy
of Hundreds of GeV and Their Interpretation,"

report presented at the Intl. Conference on Cosmic Rays and
Earth Storms, Kyoto, Japan, 4-15 Sept 1961.

DOBROVIN, N.A.; ZELEVINSKAYA, N.G.; MAKSIMENKO, V.M.; PUCHKOV, V.S.;
SLAVATINSKIY, S.A.

Pulsed spectrum of π -mesons generated in nucleon interactions
involving energies of hundreds of Bev. Izv. AN SSSR, Ser. fiz.
28 no.11:1751-1754 N '64. (MIRA 17:12)

1. Fizicheskiy institut im. F.N. Lebedeva AN SSSR.

USSR/Cultivated Plants - Fodders.

M

Abs Jour : Ref Zhur Biol., No 18, 1958, 82385

Author : Zelenskiy, S.A.

Inst : Krasnodar Scientific Research Institute of Agriculture

Title : Comparative Productivity of Alfalfa, Sainfoin and Clover
in the Central Part of the Kray

Orig Pub : Byul. nauchno-tekhn. inform. Krasnodarsk, n.-i. in-ta,
s. kh., 1957, vyp. 1, 34-35

Abstract : Variety trials during 1951-1954 showed that red clover
(RC) of the Krasnodarskiy 1 variety can be cultivated
successfully in the southern regions of the central
zone of Krasnodarskiy Kray. For the years of the trials,
336.2 centners/ha of hay was obtained with a pure cover-
less method of sowing RC; 325.6 centners of alfalfa;
303.1 centners of esparsette. With the pure, cover

Card 1/2

USSR/Cultivated Plants - Fodders.

M

Abs Jour : Ref Zhur Biol., No 18, 1958, 82385

method 212.4, 226.3 and 183.6 centners/ha were obtained.
--- T.I. Karelin

Card 2/2

- 57 -

ZELNY, A. ; KOZAK, J. ; LANG, N.

On the effect of chlorpromazine on certain vegetative functions. Cesk.
fysiol. 8 no.4:329-330 July 59.

1. Fysiologicky ustav lek. fak. KU, Plzen.
(CHLORPROMAZINE, pharmacol.) (AUTONOMIC NERVOUS SYSTEM, pharmacol.)

ZELENSKIY, V.F.

EL(1) SERIES I BOOK REFERENCE 807/2714

International Conference on the Peaceful Uses of Atomic Energy. 2nd, Geneva, 1958

Books: Scientific papers: Reference papers 1, lectures orally, Books of Soviet scientists: Book of Peaceful Reactor Metals, Moscow, Atomizdat, 1959. 670 p. (Series: 111: Trudy, vol. 3, 6,000 copies printed.

M. (Title page): A.A. Kochnev, Academician, A.P. Vinogradov, Academician, V.A. Yemel'yanov, Corresponding Member, USSR Academy of Sciences, and A.F. Leifrov, Doctor of Technical Sciences; Ed. (Inside book): V.V. Pavlovskiy and G.M. Pchelintseva; Tech. Ed.: E.I. Masal'.

NOTE: This volume is intended for scientists, engineers, physicists, and biologists working in the production and peaceful application of atomic energy; for professors and students of schools of higher technical education where the subject is taught; and for people interested in atomic energy.

CONTENTS: The book consists of 27 volumes of reports on atomic energy presented by Soviet scientists at the Second International Conference on the Peaceful Uses of Atomic Energy held in Geneva from September 2 to 13, 1958. Volume 3 consists of two parts. The first part, edited by A.I. Zubov, is devoted to geology, prospecting, concentration and processing of nuclear energy material. The second part, edited by G.L. Zverev, includes 27 reports on metallurgy, metallography, processing technology of nuclear fuels and reactor metals, and neutron irradiation effects on metals. The titles of the individual papers in most cases correspond word for word with those in the official English language edition of the Conference proceedings. See 807/221 for the titles of the other volumes of the set.

807/221 for the titles of the other volumes of the set.

- Embergen, S.F., L.P. Dekretov, M.M. Lezhik, and V.A. Kuznetsov, and S.F. Prudnyk. Some Physico-chemical Processes Occurring in Flammable Materials Under Irradiation (Report No. 219) 610
- Frankov, S.F., G.M. Kocherzhevskiy, A.B. Anan'ev, and Yu.I. Zelenitskiy. The Effect of Neutron Irradiation on the Mechanical Properties of Structural Materials (Report No. 202) 627
- Rumyantsev, K.D., V.M. Ivanov, and V.F. Salomakhin. Magazine: Metals in Alloy as Structural Materials for Nuclear Reactors (Report No. 213) 636
- Shchegolev, I.V., and V.A. Blizhnik. Corrosion Behavior of Structural Metals in Ionized Air (Report No. 204) 642
- Yushchenko, V.A., G.Lov, V.Ye. Ashurov, M.D. Akhmedovich, and M.A. Yvanov. Inquiry into the Corrosion Resistance of Certain Materials in Sodium and Lithium (Report No. 215) 642

Card 10/11

ZELENSKIY, V.F.

21(4) **HEAVY I ION IRRADIATION** SOV/2711

International Conference on the Peaceful Use of Atomic Energy. 2nd, Geneva, 1958

Doblye sovetskikh uchebnik; yadernye goryachye i reaktivnye metalli. (Series of Soviet textbooks; Nuclear fuel and reactor metals) Moscow, Atomizdat, 1959. 60 p. (Series: 12; Trade, vol. 2, 6,000 copies printed.

Ed. (title page): A.A. Acherov, Academician, A.P. Vinogradov, Academician, V.B. Yemel'yanov, Corresponding Member, USSR Academy of Sciences, and A.P. Zaslavov, Doctor of Technical Sciences; Ed. (inside book): V.V. Pavlovskiy and G.M. Priblitskiy; Tech. Ed.: E.I. Masel'.

NOTE: This volume is intended for scientists, engineers, physicists, and biologists working in the production and peaceful application of atomic energy; for professors and students of schools of higher technical education where the subject is taught; and for people interested in atomic science and technology.

CONTENTS: Volume 1 of a 6-volume set of reports on atomic energy, presented by the USSR to the International Conference on the Peaceful Use of Atomic Energy, held in Geneva from September 1 to 13, 1958. Volume 5 consists of two parts. The first part, edited by A.I. Zubov, is devoted to geology, prospecting, concentration and processing of nuclear source material. The second part, edited by G.L. Zverev, includes 27 reports on metallurgy, metallurgy, processing technology of nuclear fuels and reactor metals, and neutron irradiation effects on metals. The titles of the individual papers in most cases correspond word for word with those in the official English language edition on the Conference proceedings. See SOV/201 for the titles of the other volumes of the set.

Христианко, П.И., П.А. Перцев, В.А. Минусобицкий, К.В. Сивачинский, В.В. Урюгов, and V.F. Zeleński. Ministry of the Red-shape East Producing Element for a Heavy ION-IMPREGNATED POWER REACTOR (Report No. 2053) 655

AVAILABLE: Library of Congress

Card 14/11

21/502
1-11-58

18

110

PROCESSES AND PROPERTIES INDEX

The preparation of toxins of *Bacillus perfringens* from old cultures. S. A. Zelevinskaya and N. S. Kashintseva. *Z. Microbiol. Epidemiol. Immunitätsforsch.* (U. S. S. R.) 18, 61-4 (in German 64) (1937).—A comparison of cultures of *B. perfringens* prepd. by inoculating with 24-hr., 5-7-month and 2-year cultures indicated that the older the culture the greater its toxicity. Cultures three years old gave the highest toxicity, while 5-7-month cultures had little increase in toxicity over the 24-hr. cultures. Inoculation of cultures at short intervals results in a decrease in toxicity. Minimum toxicity is obtained in three generations. S. A. Karlala

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

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

ZELEVINSKAYA, S.A.

USSR

Central Institute Epidemiology and Microbiology, (-1944-)

"Active immunization against gas gangrene (B. Perfringens)"

Zhur. Mikrobiol. Epidemiol. i Immunobiol., No.9, 1944

ZELJEVINSKAYA, S. A. and KASHINTSEVA, N. S.

"Concerning Instructions and Data on the Study of Triantoxin."
Proceedings of Inst. Epidem and Microbiol im. Gamaleya 1954-56.

Other Personnel Identified as Participants in Sessions of the
Institute's Scientific Council Held During 1955. Inst. Epidem and
Microbiol im. Gamaleya AMS USSR

SO: Sum 1186, 11 Jan 57

ZELEVINSKAYA, S. A., and BLAGOVESHCHENSKIY, B. A.

"Concerning Purification and Concentration of Triantoxin." Proceedings of
Inst. Epidem and Microbiol im. Gamaleya 1954-56

Other Personnel Identified as Participants in Sessions of the Institute's
Scientific Council Held During 1955. Inst. Epidem and Microbiol im.
Gamaleya AMS USSR

SO: Sum 1186, 11 Jan 57.

~~ZELEVINSKAYA, S.A.~~
VOLKOVA, Z.M.; ZELEVINSKAYA, S.A.

Immunizing properties of purified concentrated adsorbed $Al(OH)_3$
anatoxins of *Clostridium perfringens*. Zhur.mikrobiol.epid. i immun.
28 no.4:77-82 Ap '57. (MLRA 10:10)

1. Iz Instituta epidemiologii i mikrobiologii imeni Gamalei AMN
SSSR.

(*CLOSTRIDIUM PERFRINGENS*, immunol.
immunizing properties of purified concentrated adsorbed
anatoxin)

ZELEVINSKAYA, S. A.

USSR / Microbiology. Microbes Pathogenic for Man and Animals. Bacteria. Anaerobic Bacilli. F

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24095

Author : Vygodchikov, G. V.; Volkova, Z. M.;
Zelevinskaya, S. A.; Larina, I. A.

Inst : Not given

Title : The Significance of Antitoxic and Anti-bacterial Factors in Active Immunity Against Experimental Gas Gangrene Induced by B. perfringens

Orig Pub : Zh. microbiol., epidemiol. i immunobiol., 1957, 10, 120-125

Abstract : Animals were immunized with a concentrated, purified, sorbed anatoxin (GSA) of B. perfringens, with various protein fractions of microbe bodies of B. perfringens of type

Card 1/3

USSR / Microbiology. Microbes Pathogenic for Man and
Animals. Bacteria. Anaerobic Bacilli:

F

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24095

"A", obtained according to the method of Kholchev, and a mixture of anatoxin with microbe fractions. I microbe fraction, which contained traces of toxin, induced the formation of an insignificant amount of antitoxin and agglutinins and a considerable amount of precipitins and complement-fixation antibodies. II and III microbe fractions, which did not contain toxin, did not induce the accumulation of antitoxin. The majority of animals of these groups turned out to be resistant to infection with 1 Dcl of spore culture of *B. perfringens*, that is, as a result of immunization with microbe fractions, anti-bacterial immunity had developed. In

Card 2/3

LARINA, I.A.; VOLKOVA, Z.M.; ZELEVINSKAYA, S.A.

Effect of antibiotics in experimental gas gangrene. Zhur.
mikrobiol.epid. i immun. no.1:119-124 Ja '58. (MIRA 11:4)

1. Iz Instituta epidemiologii i mikrobiologii imeni Gamalei
AMN SSSR.

(ANTIBIOTICS, effects,
on gas gangrene pathogens (Rus)

(GAS GANGRENE, microbiology,
eff. of antibiotics on various pathogens (Rus)

89696

S/139/61/000/001/004/018
E032/E314

11.3120

AUTHOR: Zelevinskiy, V.G.

TITLE: On the Theory of Separation of a Mixture of Non-ideal Fermi and Bose Gases

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Fizika, 1961, No. 1, pp. 54 - 62

TEXT: The phase diagram of liquid mixtures of He³ and He⁴ below 1 °K has been investigated in detail by Walters and Fairbank (Ref. 1) and Zinov'yeva and Peshkov (Ref. 2). In this temperature region a uniform liquid mixture separates into two phases with different concentrations of the isotopes and in a certain region both phases exhibit the property of superfluidity. The experimental curves are said to be insufficient to indicate whether a homogeneous solution can exist at T = 0. The phase diagram has been treated theoretically in Ref. 2. Since Boltzmann statistics appear to be inadequate in this connection, the present author discusses the phenomenon of separation of a mixture of helium isotopes on the basis of the model of non-ideal Fermi and Bose gases. It is pointed out

Card 1/3

89696

On the Theory of

S/139/61/000/001/004/018
E032/E314

that this model cannot be entirely adequate since a non-ideal
Base gas has, in distinction to the real liquid

He⁴, a phase transition of the third kind. Nevertheless, this
simple model may be useful as a first approximation and in
the qualitative treatment of the phase curves in the separation
region. The model is discussed in terms of the first-order
perturbation theory. It is shown that when $T \rightarrow 0$, it is
not possible to reach a phase equilibrium in which both
components in both phases are degenerate, whatever the
character of the interaction. For temperatures sufficiently
removed from the onset of separation, particles belonging to
the low-concentration components must be looked upon as a
Boltzmann gas. At absolute zero the components should
separate completely. The paper is entirely mathematical.
Acknowledgments are expressed to V.P. Sulin for directing this
work.

Card 2/3

89696

On the Theory of

S/139/61/000/001/004/018
E032/E314

There are 10 references: 9 Soviet and 1 non-Soviet.

ASSOCIATION: Moskovskiy gosuniversitet imeni M.V. Lomonosova
(Moscow State University imeni M.V. Lomonosov)

SUBMITTED: February 3, 1960

Card 3/3

BELYAYEV, S.T.; ZELEVINSKIY, V.G.

Anharmonicity of the oscillations of spherical nuclei. Izv. AN
SSSR. Ser. fiz. 28 no.1:127-132 Ja '64. (MIRA 17:1)

ACCESSION NR: AP4037600

S/0056/64/046/005/1853/1858

AUTHOR: Zelevinskiy, V. G.

TITLE: On the structure of collective excitations of spherical nuclei

SOURCE: Zh. eksper. i teor. fiz., v. 46, no. 5, 1964, 1853-1858

TOPIC TAGS: excitation spectrum, spherical nucleus, even even nucleus, quadrupole phonon interaction, Bose field, anharmonic oscillator, perturbation theory

ABSTRACT: In view of the appreciable anharmonicity of elementary excitations ("quadrupole phonons") in the lower excited states of a spherical nucleus and in view of the strong nonlinearity of the system of equations, it is shown that for an oscillator with anharmonicity of the type X^{2n} (of arbitrary strength) there exists a simple transformation which greatly improves the convergence of the pertur-

Card: 1/3

ACCESSION NR: AP4037600

bation-theory series. The improvement is the result of a redefinition of the ground state of the system and of the excitation in such a way that only the main effect of the nonlinearity, namely the large fluctuations, is taken into account. With such an approach the lower excited states differ little from the ground states of an effective harmonic oscillator. The analysis is first applied to a simple one-dimensional anharmonic oscillator and is extended to include spherical even-even nuclei. An explanation is obtained for the experimentally observed weak anharmonicity of the spectrum of quadrupole oscillations of spherical even-even nuclei, in spite of the fact that the interaction between the quadrupole phonons is quite strong. "I am sincerely grateful to S. T. Belyaev for continuous interest in the work and for numerous useful discussions."
Orig. art. has: 23 formulas.

ASSOCIATION: None

Card - 2/32

"APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R001964310003-4

APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R001964310003-4"

100 1000 1000 A de Shalit Phvs KPV...

difference in the spin of the nucleus
37 formulas and 7 figures.

ASSOCIATION: None

APPROVED 12/1/64

ENCL: 00

SUB CODE: NP

BERNAYEV, S.P.; ZELINSKIY, V.G.

Spin's function and the probabilities of transitions in ^{116}Sn nuclei.
(MIRA 18:8)
Izv. fiz. 2 no.1:57-62 1964

L 20389-66 EWT(m) DIAAP
ACC NR: AP6005873

SOURCE CODE: UR/0367/65/002/004/0615/0634

AUTHOR: Belyayev, S. T.; Zelevinskiy, V. G.

ORG: none

TITLE: The Green's function method in a simple nuclear model

SOURCE: Yadernaya fizika, v. 2, no. 4, 1965, 615-634

TOPIC TAGS: Green function, nuclear structure, phonon, nuclear shell model, nucleon interaction, phonon interaction

ABSTRACT: In order to check on the efficiency of the Green's function method in the theory of the Fermi liquid for finite systems with low-energy collective excitations, the authors consider a simple model of a spherical nucleus, wherein nucleons at one isolated level with large angular momentum $j \gg 1$ interact via exchange of collective excitations--quadrupole phonons (pairing between nucleons is assumed already to be accounted for). This is also the fundamental interaction in real nuclei for low-lying excitations. The limitation to a single level is quite close to reality for nuclei where the filled level has a parity different from that of the remaining levels of the given shell (for example, the proton $g^{9/2}$ level in the region of In^{115}). Since the nucleon-phonon interaction in the nucleus is too weak, it becomes necessary to use methods going beyond perturbation the-

Card 1/2

L 20389-66

ACC NR: AP6005873

ory. Consequently the authors use a previously proposed analysis (YaF v. 1, 17, 1965) of higher approximations for solving such a problem. In the present case the system of equations for the Green's functions can be made closed by using approximate relations of the Ward type, an investigation of the singularities of the electromagnetic transitions in a system with low-lying collective excitations becomes possible. The Green's function, the vertex parts, and the probabilities of the electromagnetic transitions are determined by means of general formulas previously obtained (YaF v. 2, 51, 1965) for transition between states of arbitrary nature. The results obtained are found to be incompatible with the usual assumptions of the Fermi-liquid theory, since the obtained spectrum of the quasiparticle is characterized not only by single-particle quantum numbers, but acquires an additional collective parameter, and the interaction connected with the phonon exchange is strongly retarded. Possible applications of the method to real nuclei with high spins are discussed. Orig. art. has: 2 figures and 94 formulas.

SUB CODE: 20/ SUBM DATE: 09Apr65/ ORIG REF: 005/ OTH REF: 004

Card 2/2

3417 ZELEVISKIY, Z. M.

Izgotovleniye rezhushchego instrumenta yelektrodugovoi naplavkoi.
(Opytzavoda Lengazapparat No. 2) L., 1954. 20s s. ill. 21 sm (vsesoyuz
o-uo PO rasprostraneniyu polit. i nauch. znaniy. Leningr. Dom Nauch-
tekh. Propagandy. Inform-tekh. Listok. No. 109 (682)). 3.800 ekz.
65k - avt. ukazan na 12 ys. (54-14635ZH) 621.91.02.002: 621.791.75

PROCESSES AND PROPERTIES INDEX

7

Ca

Recrystallization of calcium. J. Czuchralski and W. Zelewski. *Wydawnictwo Inst. Metalurg. Metalez.* 5, 1-5 (1934). The recrystn. of electrolytic Ca, a product of the Schering-Kahlbaum Co., was examd. Cube test samples were first heated during 2 hrs. in vacuum at 500°, later they were cold-worked, their height decreasing 5-76%, and again heated at different temps. (100-750°). Then the recrystd. samples were cut through perpendicularly to the upsetting direction, the cross sections were etched by means of a 2% soln. of lactic acid in MeOH and the grain size was measured. The results of these measurements were given in a diagram which does not vary from the generally known scheme of recrystn. of the majority of the metals so far examd. Microscopical examn. proved that Ca shows a pronounced tendency to twinning. Seven references. Edward A. Ackermann.

METALLURGICAL LITERATURE CLASSIFICATION

A 50-35 A

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

KRUPA, Barbara; NEILUBSZYC, Stanislaw; ZELEWSKA-BRODAKIEWICZ, Barbara

Effect of noradrenalin on the course of shock in myocardial infarction. Polski tygod. lek 15 no.17:632-637 25 'Ap.'60.

1. Z II Kliniki Chorob Wewnętrznych A.M. w Gdansk; kierownik:
prof. dr. Jakub Penson.

(NOREPINEPHRINE ther)

(MYOCARDIAL INFARCT compl)

(SHOCK etiol)

ZELEWSKI, L.

Phosphorous compounds in umbilical and maternal erythrocytes. p. 119

ACTA BIOCHIMICA POLONICA. (Polska Akademia Nauk. Komitet Biochemiczny)
Warszawa. Vol. 6, no. 1, 1959
Poland/

Monthly List of East European Accessions Index (EEAI), LC, Vol. 8, no. 6, June 1959
Uncl.

ZALEWICKI, L.

Relation of mitochondrial respiration to media used for the homogenization. Acta biochim.polon. 7 no.2/3:227-233 '60.

1. Zaklad Chemii Fizjologicznej AM , Gdansk Kierownik: pfor. dr Wl.Mozolowski.

(KIDNEY metab)

(MITOCHONDRIA metab)

ZYDOWO, M.; PURZYCKA, Jadwiga; ZELEWSKI, L.

The adaptation of amp aminohydrolase in rat kidney to prolonged acidosis. Acta biochim. polon. 9 no.2:n.p. '62.

1. Department of Biochemistry, Medical School, Gdansk.
(ADENOSINE PHOSPHATES metab) (AMIDASES metab)
(ACIDOSIS exper) (GLUTAMINE metab)

ZELEWSKI, L.; ZYDOWŃ, M.; PURZYCKA, Jadwiga

The excretion of citrate in male and female rats after prolonged acidosis or alkalosis. Acta biochim. polon. 9 no.2:147-151 '62.

1. Department of Biochemistry, Medical School, Gdansk.
(CITRATES urine) (ACIDOSIS exper)
(ALKALOSIS exper)

ZELEWSKI, L.; ALEKSANDROWICZ, Z.; DZIADUL, C.

The influence of oestradiol benzoate and nicotinamide on citrate excretion in female rats. Acta biochim. pol. 9 no.4:351-355 '62.

1. Department of Biochemistry, Medical School, Gdansk.
(ESTRADIOL) (NICOTINAMIDE) (CITRATES)

ZELEWSKI, L.; UMIASTOWSKI, J.

Decrease of citrate excretion in the urine of female rats after
oestradiol benzoate administration. Acta biochim. polon. 9
no.2:153-158 '62.

1. Department of Biochemistry, Medical School, Gdansk.
(CITRATES urine) (ESTRADIOL pharmacol)

ZELEWSKI, L.

Citrate synthesis in the kidney and liver of rats treated
with nicotinamide and oestradiol benzoate. Acta Biochim.
Pol. 11 no.1:25-31 '64.

1. Department of Biochemistry, Medical School, Gdansk.

ZELEWSKI, Leon, Dr. med.

The role of diphosphocoenzymes in glycolytic processes. Postepy
biochemii 6 no.4:409-423 '60. (EEAI 10:3)

1. Adiunkt Zakladu Chemii Biologicznej Akademii Medycznej w Gdansku.
(GLYCOLYSIS) (PHOSPHORUS) (COENZYMES)

ZELEWSKI, Leon

The mechanism of estrogen action. Postepy biochem. 9 no.4:
505-520 '63.

(ESTROGENS) (PHARMACOLOGY) (PERMEABILITY)
(ENZYMES) (TISSUE METABOLISM) (NAD) (NADP)

ZELEWSKI, Leon

The effect of oestrogens on citrate excretion and metabolism.
Acta biol. med. (Gdansk) 8 no.3:325-382 '64.

1. Z Zakladu Chemii Biologicznej Akademii Medycznej w Gdansk
(Kierownik Katedry: Prof. dr. Wlodzimierz Mozolowski; Kierownik
Zakladu: Doc. dr. Mariusz Zydowo).

ZELEWSKI, T.

Works in the field of pediatrics published in Polish periodicals
during 1953. *Pediat. polska* 29 no.8:841-844 Aug 54.
(PEDIATRICS,
in Poland, bibliog.)

ZELEY, I.

Rules concerning the payment of transportation fees in the transportation system according to the International Agreement on Transportation of Merchandise. p. 487.

(Kozlekedesi Kozlony. Vol. 13, no. 26, June 1957. Budapest, Hungary)

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, no. 10, October 1957. Uncl.

ZELEY, Istvan, dr.

The carrier's responsibility according to the International
Trucking Tariff. Kozleked kozl 18 no.33:617-619 19 Ag '62.

ZELEY, Istvan, dr.

Rules of procedure for compensation according to the International
Tariff of Motor Trucks. Kozleked kozl 18 no.34:635-637 26 Ag
'62.

ZELENY, Istvan, dr.

Development of international freight transportation laws and
the freight transportation by Hungarian motor vehicles.
Kozl tud sz 13 no.4:157-164 Ap. '63.

1. Közlekedés- és Postaügyi Minisaterium Autoközlekedési
Vezérigazgatóság csoportvezetője.

ZELLY, Istvan, dr.

Tasks in the development of international automotive
freight transportation. Kozleked kozl 19 no.30:510-513
28 J1 '63

ZELEY, Istvan, dr.

The use of TIR-certificates - the practice of TIR-clearance.
Kozleked kozl 19 no.3:37-40 20 Ja '63.

ZELEY, Istvan, dr.

Reply to the remark by Lajos Rady. Kozleked kozal 19 no.37:
626-628 15 S '63.

ZELENY, Istvan, dr.

International transportation of perishable foods. Kozleked
kozl 20 no. 27:447-451 5 J1 '64.

ZELENY, Istvan, dr.

International transportation of perilous goods by trucks.
Kozleked kozl 20 no.35:586-589 30 Ag '64.

001
5

Decarburization of iron alloys, especially steel. Vitkovicka, Zdenek; Narodni Podnik, F. I. Foberil, and K. Motlik (B.P. 656,608, 6.2.46; Czechoslov., 6.2.47).—Oxidized melts are mixed with liquid Mn-Si steel or cast iron containing Mn and Si in a ratio 3-6:1 (3:1). Decarburization products are completely removed by a fluid slag. This avoids the disadvantage of inclusions of solid SiO₂ in the steel which may arise if ferromanganese and ferrosilicon are used.
C. H. PUNKIN.

B1- General Metallurgy

B. 44

Methods of making moulding shapes from sand and other powdered granular, pasty, or fibrous material. Vitkovichs Zvezdny. Narodni Podnik, and L. Petrzel (B.P. 644,817. 10.12.48. Caschobov, 12.12.47 and 12.48).—Sand casting moulds and cores, foundry casting patterns, etc., are prepared by mixing sand or other basic material with a binder, e.g., Na silicate, ethyl silicate, etc., and after shaping, the mould is treated with a precipitant (CO₂, NH₃, HCl, methanol, ethanol, acetone) to form SiO₂ gel and harden the mould. J. M. Jacobs.

ZELEZARNY, Vitkovicks

(2)

Regulation of superheating in steam boilers. Vitkovicks Zele-
zarny Klementa Gottwalda and R. Dolezal (B.P. 698,282, 28.4.50.
Czechoslov., 2.5.49).— Superheating is done in two stages, with an
attenuator after the first stage keeping a constant steam temp.,
and another before the second stage to regulate the final steam temp.
K. Ringway.

ZELEZINSKAYA, L.M. [Zelezins'ka, L.M.]

Reproduction of pelagic fishes in the area close to the Dnieper
Delta in the northwestern part of the Black Sea. Nauk. zap. Od.
biol. sta. no.3:60-64:61. (MIRA 16:6)
(BLACK SEA--FISHES--EGGS)

ZELEZINSKAYA, L.M. [Zelezins'ka, L.M.]

Food of some invertebrates in the hyponeuston of the Black Sea.
Dop. AN URSS no.2:246-248 '62. (MIRA 15:2)

1. Odesskaya biologicheskaya stantsiya. Predstavleno akademikom
AN USSR A.P.Markevichem [Markevych, O.P.].
(Black Sea—Zooplankton)

ZELEZINSKAYA, I.M. [Zelezins'ka, I.M.]

Presence of larvae of the Black Sea anchovy in the surface layer
of water during the daytime. Nauk.zap.Od.biol.sta. no.5:104-105
'64. (MIRA 18:1)

KOMAR, T., bukhgalter; ZELEZINSKAYA, S.; POSTOLOV, I.; DORONIN, N.

Problems in managerial planning, calculation, and organization.
Muk. selev. prom. 29 no.2:16-17 F '63. (MIRA 16:8)

1. Starshiy ekonomist Grodnenskogo upravleniya khleboproduktov (for Zelezinskaya).
2. Ministerstvo proizvodstva i zagotovok sel'skokhozyaystvennykh produktov Uzbekskoy SSR (for Postolov).
3. Glavnyy inzh. Lukhovitskoy mel'nitsy Moskovskoy oblasti (for Doronin).

(Grain)

ZELEZINSKAYA, S.

More about business accounting. Muk.-elev. prom. 28 no.2:22-23
F '62. (MIRA 15:3)

1. Starshiy ekonomist Grodnenskogo oblastnogo upravleniya zagotovok.
(Grain handling--Accounting)

COUNTRY : USSR
CATEGORY : Cultivated Plants. Industrial, Oleiferous, Sugar. K
ABS. JOUR. : RZhBiol., No. 23 1958, No. 104775
AUTHOR : Revin, B. T., Zelezinskiy, Ye. N.
INST. : -
TITLE : Hemp in Kuban'
ORIG. PUB. : Len i koroplya, 1958, No. 1, 15-18
ABSTRACT : Kuban' is the principal supplier of the seeds of southern hemp for other oblast's and Republics of this country. Here, 13 rayons, chiefly in the northern and southern parts of Kraenodarskiy Kray, are engaged in hemp growing. Agricultural technique measures assuring production of high yields of the stems but chiefly of the seeds of hemp are described. -- V. Z. Tselik

CAPD: 1/1

ZELEZNIAKIENE, V.

Oxygen saturation of the blood in female athletes in various phases of the ovarian-menstrual cycle. Sveik. apsaug. 8 no.11: 24-30 '63.

1. Lietuvos Valstybinis kuno kulturos institutas.
(SPORT MEDICINE) (OXIMETRY)
(MENS TRUATION) (OVULATION)

ZELEZNIK, A.

Protecting workers in coal mines. p. 32.

Periodical: SOCIJALNA I ZDRAVSTEVENA POLITIKA. (Savet za narodno zdravlje Srbije)
Beograd.

MEDICINE

Vol. 12, no. 1, 1959.

SO: Monthly List of East European Accessions (EEAI) LC

Vol. 8, No. 4
April 1959, Uncl.

MUDRA, Frantisek; ZELEZNIK, Oldrich

Irregular international air transportation. Lstecky obzor 8 no.1:2-4
Ja '64.

ZELEZNIKAR, A.

Yugoslavia (430)

Technology

Ground plane antenna for short waves and
ultra-short waves. p. 212, Elektrotehnicar,
Vol. 6, no. 11/12, 1952.

East European Accessions List, Library of Congress,
Vol. 2, No. 4, April 1953. UNCLASSIFIED.

ZELEZNIKAR, A.

"Plate modulation and its technique." (To be contd.) p. 73. (Elektrotehnicar, Vol. 7, no. 4, 1953, Zagreb.)

SO: Monthly List of ~~Accessions~~ East European Accessions, Vol. 2, No. 9, Library of Congress, September 1953, Uncl.

ZELEZNIKAR, A.

"The Technique Of Plate Modulation" p. 28. (Elektrotehnicar, Vol. 7, no. 2, 1953, Zagreb.)

SO: Monthly List of East European Vol. 2, No. 9, September 1953, Uncl.
Russian Accessions, Library of Congress,

ZELEZNIKAR, A.

Short-wave communication receivers. (To be contd.) p. 89.

ELEKTROTEHNICAR. (Tehnicka knjiga) Zagreb. Vol. 9, no. 7/8, 1955.

So. East European Accessions List Vol. 5, No. 9 September, 1956

ZELEZNIKAR, A.

Short-wave communication receivers. (Conclusion) p. 144. ELEKTROTEHNIKAR.
(Tehnicka knjiga) Zagreb. Vol. 9, no. 12, 1955.

So. East European Accessions List Vol. 5, No. 9 September, 1956

ZELEZNIKAR, A.

General use of Smith's diagram. p. 398.

ELEKTROTEHNISKI VESTNIK. ELECTROTECHNICAL REVIEW. Ljubljana, Yugoslavia.
Vol 26, no. 11/12, 1958.

Monthly List of East European Accessions (EEAI) LC, Vol. 8, no. 6, June 1959.

Uncl.

ZELEZNIKAR, Anton, ing. (Ljubljana, Gradaska ulica 10)

Linear geometric mapping of impedance diagrams. Elektr vest 27
no.11/12:361-364 N-D '59. (EEAI 10:1)
(Impedance (Electricity))

URAN, Demetrij, ing.; ZELEZNIKAR, Anton, ing.

Third international conference for analog computers, Opatija, September
4-9, 1961. Automatika 2 no.4:245 0 '61.

ZELEZNIKAR, Anton, ing.

Analogue-digital conversion. Automatika 2 no.5:281-284 H '61.

9/044/63/000/002/041/050
A060/A126

AUTHOR: Železnikar, Anton

TITLE: Digital addition and subtraction elements in two-valued logic

PERIODICAL: Referativnyy zhurnal, Matematika, no. 2, 1963, 50, abstract 2V248
(Avtomatika, 1962, v. 3, no. 3, 153 - 160; Slovakian; summary in English)

TEXT: The paper describes certain networks of functional elements, in particular trigger networks for addition, subtraction and complementation.

[Abstracter's note: Complete translation]

Card 1/1

ZELEZNIKAR, Anton, inz. (Ljubljana)

Algorithms and digital systems. Avtomatika 3 no.4:226-231
Ag '62.

KORENINI, Janez, inz. (Ljubljana); KOLBEZEN, Peter, inz. (Ljubljana);
ZALAZNIK, Joze (Ljubljana); ~~ZELEZNIKAR, Anton, inz. (Ljubljana)~~

Transistorized pulse analog-digital converter. Avtomatika
3 no.5:319-326 0 '62.

ISAKOVIC, S., doc. inz.; MUREN, H.; BUNJEVCEVIC, I., inz.; HRIBAR, M.;
ZELEZNIKAR, A.

New books and reviews. Avtomatika 3 no.5:385-386 0 '62.

ZELEZNIKAR, Anton, inz. (Ljubljana)

Coding, control, and correction of digital information. *Automatika*
3 no.6:402-410 D '62.

KORENINI, J. (Ljubljana); KOLBEZEN, P. (Ljubljana); ZELEZNIKAR, A.
(Ljubljana)

The transistor digital analog converter. *Automatika* 3 no.6:410-414
D '62.

S/044/62/000/007/070/100
C111/C222

16.1500

AUTHOR: Zeleznikar, Anton

TITLE: Solvability problems of propositional equations

PERIODICAL: Referativnyy zhurnal, Matematika, no. 7, 1962, 47-48, abstract 7V209. ("Glasnik mat.-fiz. i astron.", 1960, 15, No. 4, 237-244)

TEXT: Considered is the solvability of propositional equations or of a system of propositional equations, i.e. one determines conditions under which two propositional functions or two systems of propositional functions become equivalent, if one or more variables are functions of the remaining variables. The conditions for the solvability of the propositional equations are reduced to the problem that the sum of the given functions be equivalent to zero with respect to modulus 2, i.e. to $z(x_1, \dots, x_n) = f(x_1, \dots, x_n) \nabla g(x_1, \dots, x_n)$, where f and g are the given propositional functions, where against $f \nabla g = \overline{f \cdot g}$ (negation of the equivalence of f and g). If $z(x_1, \dots, x_n) = x_k z_k(x_1, \dots, x_{k-1}, x_{k+1}, \dots, x_n) \nabla \bar{x}_k \cdot z_k(x_1, \dots, x_{k-1}, x_{k+1}, \dots, x_n)$, then for the solvability of the

✓c

Card 1/2

Solvability problems of ...

S/044/62/000/007/070/100
C111/C222

equation $f = g$ for x_k (i.e. that x_k be a certain function of the remaining variables) it is necessary and sufficient that $z_k \cdot z_k^- = 0$. The condition for the solvability of the equation for x_k and x_{k+1} , if the equation is not solvable for x_k , reads as follows

$$(z_k z_k^-)_{k+1} (z_k \cdot z_k^-)_{k+1} = 0$$

where

$$z_k \cdot z_k^- = x_{k+1} (z_k \cdot z_k^-)_{k+1} \vee \bar{x}_k (z_k \cdot z_k^-)_{k+1}$$

Analogous conditions are written down for the solvability of the propositional equations for $x_k, x_{k+1}, \dots, x_{k+l}$. Solutions for these $x_k, x_{k+1}, \dots, x_{k+l}$ as functions of $x_1, \dots, x_{k-1}, x_{k+l+1}, \dots, x_n$ are given.

The method is generalized to systems of propositional equations.

[Abstracter's note : Complete translation.]

Card 2/2

ZELEZNIKAR, Anton, inz., visi strucni saradnik (Ljubljana, Jamova
cesta 39).

Synthesis of digital automata by the method of solving equations of the algebra of logic. Tehnika Jug 18 no.7:Supplement: Elektrotehnika 12 no.7:1297-1305 J1'63.

1. Nuklearni institut "Jozef Stefan", Ljubljana.

ZELEZNIKAR, Anton (Ljubljana)

Some arithmetic normal algorithms. Glas mat fiz Hrv 17 no.3/4:
159-170 '62 [publ.'63]

Solving logic problems with digital computers. 171-179

ZELEZNIKAR, A., ins.

Congress of the International Federation of Information Processing.
Avtomatika 3 no.5:376-377 0 '62.