

BC

A-1

[Cosmic] showers studied at a height of 4250 metres above sea-level. V. VERZAR and R. LEARY (Campa. rend. Acad. Sci. U.R.S.S., 1937, 17, 193-194) cf. preceding abstract).—The dependence of the no. of coincidences in proportional counters on the thickness of the Pb screen shielding them indicates that a large no. of the coincidences are due to cosmic showers. J.W.S.

ASTM-SLA METALLURGICAL LITERATURE CLASSIFICATION

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ASTM-SLA METALLURGICAL LITERATURE CLASSIFICATION

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a-1

Application of a proportional amplifier to X-ray structure analysis. R. EMMY (Compt. rend. Acad. Sci. U.R.S.S., 1960, 23, 43-44).—A proportional amplifier for use in determination of crystal structure by X-ray analysis is described. It will amplify ionization currents by 10^4 , and can therefore be used to examine the structure of substances which will give only a weak diagram, and makes it possible to carry out measurements directly with the use of an electrometer instead of making lengthy photographic exposures. The instrument has been used in the examination of the crystal structure of frog muscle. There are two max. corresponding with identity periods of 10 and 4.8 Å. A displacement of the position of the max. occurs as the tissue dries. The method has also been applied to the examination of the structure of Cu and of $\text{NH}_4\text{CH}_2\text{CO}_2\text{Ag}$.

A. J. M.

ASS-SLA METALLURGICAL LITERATURE CLASSIFICATION

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ISAYEV, B.M., KRISS, A. Ye., & RUKINA, Ye. A.

"Some observations on Bacterial Cytology using the Electron Microscope."
SO: Izvestia A.N. SSSR, Ser. Biol. 1945(6):678-687

ISAYEV, B. M.

PHASE I

TREASURE ISLAND BIBLIOGRAPHICAL REPORT

AID 679 - I

BOOK

Call No.: QC787.I6v4

Authors: VEKSLER, V. I.; GROSHEV, L. V.; ISAYEV, B. M.

Full Title: IONIZATION METHODS OF RADIATION ANALYSIS

Transliterated Title: Ionizatsionnyye metody issledovaniya izlucheniya

PUBLISHING DATA

Originating Agency: None

Publishing House: State Publishing House of Technical and Theoretical Literature ("Gostekhizdat")

Date: 1949

No. pp.: 424

No. of copies: 5,000

Editorial Staff: None

PURPOSE: The book is intended for a wide range of scientific workers in various fields and for graduate students and teachers.

TEXT DATA

Coverage: Part I of this work (p. 9-162) discusses ionization chambers for alpha, beta, gamma radiation, for cosmic rays and fast neutrons, as well as impulse chambers. In part II (p. 163-423) counters for charged particles are examined and the theories of their operation and of corrections for individual counters are given. Proportional counters, including those for fast particles and neutrons, and self-extinguishing and non self-extinguishing counters are examined in detail. New types of counters and different modes of operation

ISAYEV, B. [M.]

5
1 RML

7839

IONIZATION METHODS OF INVESTIGATION. V. Veksler,
L. Groshev, and B. Isayev. Moscow-Leningrad, Gosatekhnizdat.

1859. 427p. (in Russian) (Book on display at Geneva
Conference)

Part I. Ionization chambers for α , β , γ , and cosmic
radiations, chambers for neutrons and pulse chambers.

Part II. Counters of charged particles; the theory of their
operation and corrections for separate counters. Proportional counters (for fast particles and neutrons) and counters
with individual discharges (non-self-extinguished and self-
extinguished). (publisher's note)

- RML

(2)

ISAYEV, B.M. ISAYEV, B.M.
~~ISAYEV, B.M.~~

✓ An integrating and indicating roentgenometer. B. M. Isayev, A. N. Krongauz, and S. A. Titov (Inst. Biophys., Acad. Med. Sci. U.S.S.R., Moscow). *Zhur. Tekh. Fiz.* 20, 1372-81 (1950).—A roentgenometer scheme is described for measuring x-ray and γ -ray dosages of very high and low intensities. The roentgenometer can measure the strength of placed in a container contg. the brass aperture piece and acetone. After soln. of the lacquer, the acetone was drained, and the metal foil settled on the aperture. It could be shown that foils made by 2 were never quite free of sub-microscopic pinholes. Foils with backing, deposited on an aperture of 4-6 mm. withstood 3 microamp./sq. cm. proton current for 8 hrs. Nonbacked foils withstood 1 microamp./sq. cm. current for 1-2 hrs. The particles leaving the foil were analyzed with a magnetic analyzer. The ratio I_{α}/I_{β} for Al and Cu foils is of the order of 20% at 15 e.kv. and drops to 8% at 30 e.kv.; for Be I_{α}/I_{β} is 60% at 8, 30% at 15, and 10% at 30 e.kv. Deuterons of 28 e.kv. show the same ratios as protons of 14 e.kv. A mol. beam of H_2^+ of 32 e.kv. was completely dissociated into protons and ions and the ratio corresponded to the ratio at 16 e.kv. 62

ISAYEV, B.M.

8
/RML

17749

USE OF RADIOACTIVE COBALT IN GAMMA-DEFECTOS-
COPY: A. V. B'ergal, V. V. Bochkarev, B. M. Isayev,
U. Ya. Margulis, and G. M. Frank. Akademiya Nauk S.S.S.R.
1951. (In Russian) (Book on display at Genova Conference)
Results of investigations carried out for the purpose of
obtaining data for the practical application of artificial and
radioactive cobalt in γ defectoscopy. Main problems
connected with the use of Co^{60} in defectoscopy. Description
of new devices developed for applying Co^{60} with an activity
of up to 100 g-equiv. of radium in γ defectoscopy. New
technical opportunities in this field. (publisher's note)

(11) Jan

Rms

ISAYEV, B., VERSLER, V. and GROCHNEV, L.

"Ionizational Methods for Investigations of Radiations," Glavpoligrafizdat,
Main Polygraphic Publishing House, 2nd edition, 437 pp, 1952.

Y
A
ISAEV, B.M.

Water test model distribution of depth doses from the telecurie
apparatus using radioactive cobalt. A.M. Voinov, G.B. Gulenko,
B.M. Isaev, U.IA. Margulis. Vest. rent. 1 rad. no. 4:52-61
Jl-Ag '53.

ISAYEV, B. M.

USSR/Medicine - Radiology

Card 1/1

Authors : Isayev, B. M., and Margulis, U. Ya.

Title : Depth doses for point sources of gamma-rays of radioactive cobalt

Periodical : Vest Rentgen i Radiol 1, 68-74, 1954

Abstract : Studied the depths of penetration of gamma-rays in water and in air by means of a specially constructed apparatus consisting of a point source of gamma-ray radiation (Co^{60}) and a tank of water. Observed and plotted the depths of penetration for fields of 20, 50, and 100 cm^2 . Two drawings; six graphs; four tables. No references

Institution : Institute of Biophysics, Academy of ~~Medical~~ Sciences USSR

ISAYEV, B. M., VOLNOV, A. M., GULENKO, G. B. and MARGULIS, U. Ya.

"Distribution of Deep Doses in Water Phantom from Tele-Curie Units Charged with
Radioactive Cobalt," Medgiz, 1955

ISAYEV, B.M.; MAROULIS, U.Ya.

[Use of depth doses for spot sources of gamma rays from radioactive cobalt] Glubinnye dozy dlia tochechnykh istochnikov gamma-luchei radioaktivnogo kobal'ta. Moskva, Medgiz, 1955. 6 p. (MIRA 11:4)

1. Is Instituta biofiziki Akademii meditsinskikh nauk SSSR.
(COBALT—THERAPEUTIC USE)

ISAYEV, B.M.

USSR/Fitting Out of Laboratories - Instruments.
Their Theory, Construction, and Use.

H-

Abs Jour : Ref Zhur - Khimiya, No 3, 1957, 8696

Author : Andreyeshchev, Ye. and Isayev, B.M.

Inst :

Title : Concerning Some Characteristics of Spark Counters Used
in the Recording of α -Particles.

Orig Pub : Zh. experim. i teor. fiziki, 1955, 28, No 3, 335-342

Abstract : It is shown that a constant corona discharge leads to
the self-stabilization of spark counters. The change
in counter characteristics as a function of the distance
between the electrodes and of the humidity has been
investigated. It is shown that the efficiency of the
counter increases with increasing humidity.

Card 1/1

ISAYEV, B. M. and SIMONENKO, D. L.

"Preliminary Data on the Effects of Atomic Bomb Explosions on Concentration of Artificial Radioactivity in the Lower Atmosphere and Soil," a report edited by the above and appearing in the Washington Post and Times Herald, 5 June 1957

21(3)

SOV/112-59-2-3287

Translation from: Referativnyy zhurnal. Elektrotehnika, 1959, Nr 2, p 151 (USSR)

AUTHOR: Aradenne, M., Yeger, G., Isayev, B.^M, Roggenbuk, V., and
Froylikh, G.

TITLE: Pocket-Type Gamma-Radiation Dosimeter
(Karmannyi dozimetr gamma-izlucheniya)

PERIODICAL: V sb.: Issled. v oblasti dozimetrii ioniziruyushchikh izluchenyi.
M., AS USSR, 1957, pp 112-114

ABSTRACT: A pocket-type electrometer with a quartz filament and a reading microscope is described. The electrometer has a linear scale calibrated in milliroentgens. The scale span is 0-200 milliroentgens. Thirty experimental models of the instrument were tested. The charge leakage never exceeded 5% per day. The reading spread of individual meters did not exceed 10%.

N.G.Z.

Card 1/1

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Translation from: Referativnyy zhurnal. Mashinostroyeniye, 1959, No. 7,
pp. 169 - 170, # 25646

AUTHORS: Andreyeshchev, Ye.A., Isayev, R.M., Mel'nikov, I.F.

TITLE: ¹⁴Spark Counter for the Checking of Alpha-Active Contaminated
Surfaces

PERIODICAL: V sb.: Issled. v obl. dozimetrii ioniziruyushchikh izlucheniye. ✓
Moscow, AN SSSR, 1957, pp. 162 - 165

TEXT: The authors describe the design of a portable recorder de-
vised for the checking of α -active contaminated surfaces. The device is
a multiwire spark counter, whose cathode (in distinction from other models
described previously) possesses an area of 150 cm². The anode, supplied
with a high-voltage current of approximately 4500 v, is composed of 25
tungsten wires of 0.1 mm in diameter, which are drawn parallel to the
mirror-like polished surface of the steel cathode, at a distance of 1.5 mm
from the surface of the latter. The cathode stands more than 10⁷ dis-
charges. The electrodes are fastened on a plexiglass base. The fastening

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Spark Counter for the Checking of Alpha-Active Contaminated Surfaces

and straining of the wires as well as the adjustment of the distance between the cathode and the wire is effected with the aid of screws. The pulses are recorded with the aid of a small neon tube or headphones. The initial operating voltage amounts to approximately 3,800 v. It is emphasized that the efficiency of the counter does not amount to more but 0.5 - 1 %, but even this magnitude is completely sufficient for radiation monitoring. An advantage of the counter is the absence of background and the possibility of recording α -particles at any value of the β and γ -background. The device has a high stability, its weight is 4 kg. There are 5 figures and 5 references.

M.V.S.

Translator's note: This is the full translation of the original Russian abstract.

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21(3)

AUTHORS:

Isayev, B. M., Shal'nov, M. I.

SOV/89-6-1-7/33

TITLE:

Measurement of the Skin Dose of Hard Bremsstrahlung
(Izmereniye tkanevoy dozy zhestkogo tormoznogo izlucheniya)

PERIODICAL:

Atomnaya energiya, 1959, Vol 6, Nr 1, pp 57 - 62 (USSR)

ABSTRACT:

The γ -rays with a maximum energy of up to 250 MeV which occur as bremsstrahlung in a synchrotron were used for the purpose of distributing the penetration depth dose in a paraffin phantom. Investigation was carried out with maximum bremsstrahlung energies of 80, 180 and 250 MeV.

The paraffin phantom was composed of separate paraffin blocks having a cross section of 30.30 cm and a thickness of 1, 2, 3 and 5 cm. A maximum thickness of up to 41 cm could be attained, which the bremsstrahlung was able to penetrate completely. Between the paraffin layers an X-ray film of 24.0 cm cross section was placed. The first paraffin plate of the phantom was at a distance of 260 cm from the radiation output of the synchrotron.

The blackening intensity of the exposed films was measured along the entire breadth of the blackening spot by means of a densitometer, and was compared with the blackening intensity

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Measurement of the Skin Dose of Hard
Bremsstrahlung

SOV/89-6-1-7/33

of a control film which had been irradiated with Co^{60} γ -rays. The distribution of the depth dose is represented by a curve. The position of the ionization maxima can be well approximated by the analytical expression

$$\frac{d}{\sqrt{E}} = 1.14 (1 - e^{-0.1E})$$

It applies when $E > 4$ MeV and when the focal length is 100 cm. E is the maximum bremsstrahlung energy in MeV, d - the depth of the maximum in g/cm^2 .

For the purpose of measuring the average skin dose of a hard bremsstrahlung it is possible to use either a thimble chamber or a calorimeter. The two measuring methods are compared with each other.

In conclusion, the admissible dose for various γ -energies is calculated and the corresponding curves are plotted. The results obtained agree well with the data given by reference 4. There are 6 figures and 4 references, 2 of which are Soviet.

~~Card 1/3~~

21(0)

AUTHORS:

Koryakin, Yu., Isayev, B., Shamanov, M., Zverev, G.

SOV/89-6-6-26/27

TITLE:

Short Encyclopedia "Atomnaya energiya" (Kratkaya entsiklopediya "Atomnaya energiya"). Review (retsenziya)

PERIODICAL:

Atomnaya energiya, 1959, Vol 6, Nr 6, pp 693-695 (USSR)

ABSTRACT:

The authors discuss the above mentioned book which was published in 1959 in Moscow by the Gosudarstvennoye nauchnoye izdatel'stvo "Bol'shaya Sovetskaya Entsiklopediya" (Scientific State Publishing House "Great Soviet Encyclopedia"). There is 1 Soviet reference.

Card 1/1

ISAYEV, B.M.

Symposium on dosimetry. Atom.energ. 9 no.5:424-426 N '60.

(MIRA 13:11)

(Radiation--Dosage)

KUZIN, A.M.; ISAYEV, B.M.; KHVOSTOVA, V.V.; TOKARSKAYA, V.I.; BREGADZE, Yu.I.

Effectiveness of the biological action of C^{14} during its incorporation into living structures. Dokl. AN SSSR 134 no.4: 951-954 0 '60. (MIRA 13:9)

1. Institut biologicheskoy fiziki Akademii nauk SSSR. 2. Chlen-korrespondent AN SSSR (for Kuzin).

(CARBON--ISOTOPES)

(PLANTS, EFFECT OF RADIOACTIVITY ON)

BIHERGAL', A.V.; SINITSYN, V.I.; LESHCHINSKIY, N.I.; ISAYEV, B.M., red.;
PEREVERZEV, V.V., red.; MAZEL', Ye.I., tekhn.red.

[Isotopic gamma-ray sources] Isotopnye gamma-ustanovki. Pod red.
B.M.Isaeva. Moskva, Gos.izd-vo lit-ry v oblasti atomnoi nauki
i tekhniki, 1960. 137 p. (MIRA 14:3)
(Gamma rays--Equipment and supplies)

SEAL'NOV, Mikhail Ivanovich; ISAYEV, B.M., kand.fiz.-matem.nauk, red.;
ZAVODCHIKOVA, A.I., red.; VLASOVA, N.A., tekhn.red.

[Neutron tissue dose] Tkanevaia doza neitronov. Pod red. B.M.
Isaeva. Moskva, Izd-vo glav.upr.po ispol'zovaniiu atomnoi
energii pri Sovete Ministrov SSSR, 1960. 217 p. (MIRA 13:4)
(RADIOBIOLOGY) (NEUTRONS--PHYSIOLOGICAL EFFECT)

ISAYEV, B.M.

Physical principles of radiobiological experiments with neutron
flux. Biofizika 5 no. 4:479-487 '60. (MIRA 13:12)

1. Institut biologicheskoy fiziki AN SSSR, Moskva.
(RADIOBIOLOGICAL RESEARCH) (NEUTRONS)

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B006/B056

21.8100
AUTHORS:

Bragadze, Yu. I., Isayev, B. M., Kvasov, V. A.

TITLE:

An Ionization Method for Determining Absorbed Energy in Mixed Fluxes of Fast Neutrons and γ -Rays

PERIODICAL:

Atomnaya energiya, 1960, Vol. 9, No. 2, pp. 126-131

TEXT: A large number of papers have already dealt with gamma-dosimetry, and several methods have been developed for neutron-dosimetry (also with a gamma background of 10 to 15%). If the absorbed doses D_γ and D_n are nearly equal, the methods of photographic emulsion and the chemical methods are too inaccurate. Homogeneous, thimble ionization chambers (Refs. 7, 8) appear to be the most useful. In the present paper, the authors give results obtained when determining the absorbed doses in biological objects, obtained by the last-mentioned method. In this method, the neutron and gamma components are separated by using two chambers having different hydrogen contents in their walls. From the difference between the effects it is possible to determine the ratio of the components. It is of importance

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An Ionization Method for Determining Absorbed
Energy in Mixed Fluxes of Fast Neutrons and
 γ -Rays

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B006/B056

that the chambers be homogeneous, i.e., that the walls have the same chemical composition as the filling gas, so that absorption coefficient and mass stopping power of wall and gas are equal. The authors operated with two and three chambers; the first chamber consisted of polyethylene,¹ and was filled with ethylene, the second consisted of graphite with a CO_2 filling, the third was made from a special plastic material of the type "Aerion"¹⁵ (Ref. 12), filled with an ethylene- CO_2 mixture (1:1.25). The hydrogen content in the filling gas mixture was the same as in Aerion, the oxygen and carbon contents varied, which, however, did not essentially disturb the homogeneous behavior of the chamber. The conducting layer of the polyethylene chamber consisted of a semi-permeable aluminum foil (0.01 mg/cm^2) which had been sputtered in vacuo. The volumes of the three chambers were 2.12, 2.26, and 2.59 cm^3 . The experiments were carried out on one of the horizontal holes of the MPT(IRT) reactor. A system of boron carbide and bismuth filters (150 mm thick) was used to reduce the gamma

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An Ionization Method for Determining Absorbed
Energy in Mixed Fluxes of Fast Neutrons and
 γ -Rays

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and thermal neutron fluxes. The energy, W , necessary for the formation of ion pairs in the filling gases amounted to 27 ev, 33.5 ev, and 30.2 ev for the three chambers used. The data concerning the chemical composition of the biological tissues (Table 1) and the corresponding mass absorption coefficients are used to calculate the coefficients a_i and b_i (a_i denote the ratios between the true mass absorption coefficients of the wall material of the i -th chamber and the true mass absorption coefficients of the tissue; b_i denote the ratios between the energy absorbed in 1 g of the wall material of the i -th chamber and the energy absorbed in 1 g of tissue). The true mass absorption coefficients μ/ρ and the values of a_i for muscle and bone tissue as well as polyethylene, Aerion, and graphite are given in Table 2, and the values of b_i (for different neutron spectra) in Table 3. The b_i -values do not depend on the shape of the spectrum within the limits of measuring accuracy, which is of great importance, because it is not necessary to take the change in the spectral composition of the

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An Ionization Method for Determining Absorbed Energy in Mixed Fluxes of Fast Neutrons and γ -Rays

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neutron flux into account when determining the tissue doses at various depths. The doses $D_1 - D_3$ absorbed in the walls of the three chambers correspond to the following doses absorbed in muscles and bones:

Polyethylene: $1.04 D_\gamma^m + 1.41 D_n^m = D_1$; $1.07 D_\gamma^b + 2.15 D_n^b = D_1$.

Aerion: $0.96 D_\gamma^m + 0.55 D_n^m = D_2$; $0.98 D_\gamma^b + 0.85 D_n^b = D_2$.

Graphite: $0.915 D_\gamma^m + 0.105 D_n^m = D_3$; $0.94 D_\gamma^b + 0.18 D_n^b = D_3$.

From these relations it is possible to calculate the tissue doses. The neutron-sensitivities of the chambers were between 0.2 and 8 Mev. A final investigation of the measurement of absorbed energy (for neutrons) resulted in an error of $\sim 15\%$. It depends only little on D_n/D_γ . The authors thank

Yu. F. Chernilin for his help, and G. B. Radziyevskiy for discussions. There are 3 figures, 3 tables, and 17 references: 6 Soviet, 2 British, 3 US, and 1 German.

SUBMITTED: April 11, 1960

Card 4/4

ISAYEV, B. M., BREGADZE, Yu. I., KVASOV, V.A.

"Ionization Technique for Evaluation of the Absorbed Energy in the
Mixed Fluxes of Fast Neutrons and Gamma Rays."

Report presented at the meeting on Radiation Dosimetry, Intl. Atomic
Energy Agency,
Vienna, 7 - 11 June '61

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PHASE I BOOK EXPLOITATION

80V/5425

10

Pedorov, N.D., Candidate of Technical Sciences, Compiler

Kratkiy spravochnik inzhenera-fizika: Yadernaya fizika. Atomnaya fizika
(Concise Handbook for the Engineering Physicist: Nuclear Physics. Atomic
Physics) Moscow, Atomisdat, 1961. 507 p. 28,000 copies printed.

Ed.: A.F. Alyab'yev; Tech. Ed.: Ye. I. Mazel'.

PURPOSE: This reference book is intended for engineers and physicists working
in the field of atomic and nuclear physics.

COVERAGE: The first seven parts of the book contain the most necessary reference
material on atomic and nuclear physics. The remaining parts present information
and data from other related fields. The last part gives the information on
systems of units compiled from the new GOST specifications, physical constants,
and some mathematical data. No personalities are mentioned. References
accompany each part of the book.

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Concise Handbook (Cont.)

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Bibliography

PART EIGHT. DOSIMETRY AND MAXIMUM PERMISSIBLE IONIZATION
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Card 9/13

S/747/62/000/000/016/025
D296/D307

AUTHORS: Kuzin, A. M., Isayev, B. M., Khvostova, V. V., Tokarskaya, V. I. and Bregadze, Yu. I.

TITLE: The biological effect of C^{14} incorporated into living tissues

SOURCE: Radiatsionnaya genetika; sbornik rabot. Otd. biol. nauk AN SSSR. Moscow, Izd-vo AN SSSR, 1962, 267-273

TEXT: After the performance of nuclear tests the content of radioactive carbon in the atmosphere increased between 1955 and 1958 at 5% annually. When assessing the possible biological effects of these doses they are usually estimated by the radiosensitivity of living tissues exposed to the external source of radiation. These calculations fail, however, to take into consideration the special geometry of incorporation of C^{14} into radiosensitive structures such as chromosomes as well as the so-called transformation effect in DNA molecules ($C^{14} \rightarrow N^{14}$). These effects may lead to more frequent aberrations. ✓

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The biological effect ...

S/747/62/000/000/016, '325
D296/D307

tions than expected from calculations on the basis of the dose to which the cells are exposed. The authors compared the biological effect of C^{14} incorporated into plant seedlings, with the effect of exposure to external gamma radiation emitted by Co^{60} . Normally growing 10-day old plants were placed into a photosynthesis chamber containing $C^{14}O_2$ (total activity $100 \mu C$, volume of chamber $22.5 dm^3$); radioactivity of the inner layer of the plants was estimated on scintillation counters and the tissues were investigated cytologically, counting the proportion of micronuclei and the mitotic index. The percentage of cells with chromosome aberrations increased from 0.16% in the control plants to 0.26% in the experimental plants. Plant cells exposed to more than double the dose of radiation (Co^{60}) showed a slight increase in the number of aberrations but calculation revealed that the mutagenic effect of incorporated C^{14} was ten times higher than that of an equal dose of external irradiation.

This fact shows that the transformation effect $C^{14} \rightarrow N^{14}$ as well as
Card 2/3

The biological effect ...

S/747/62/000/000/016/025
D296/D307

the special geometry of the incorporation of C^{14} are factors to be considered further. There is 1 figure and 1 table.

ASSOCIATION: Institut biologicheskoy fiziki AN SSSR, Moskva (Institute of Biological Physics, AS USSR, Moscow)

Card 3/3

BREGADZE, Yu.I.; ISAYEV, B.M.; KVASOV, V.A.; LEVIN, B.A.; CHERNILIN, Yu.F.

Production of "pure" fluxes of fast neutrons for radiobiological
works using an IRT-1000 reactor. Atom. energ. 12 no.6:537-538
Je '62. (MIRA 15:6)

(Nuclear reactors) (Neutrons) (Radiobiology)

ACC NR: AP7000130

SOURCE CODE: UR/0115/66/000/011/0020/0022

AUTHOR: Isayev, B. M.; Bregadze, Yu. I.; Korshikov, A. V.

ORG: none

TITLE: The units "ber" and "equivalent rad"

SOURCE: Izmeritel'naya tekhnika, no. 11, 1966, 20-22

TOPIC TAGS: ionizing radiation biologic effect, relative biologic efficiency, radiobiology, x ray radiation biologic effect, radiation shielding, radiation safety, radiation dosimetry

ABSTRACT: The authors answer the objections to GOST 8848-63, establishing standard units for radiological measurements, raised by M. F. Yudin [see AP7000128] and I. B. Keirim-Markus et al. [see AP7000129]. Since GOST 8848-63 permits use of the units rad and roentgen in addition to or instead of the official standard units joule/kg and coulomb/kg, there is no need to revise the GOST standard as suggested by Keirim-Markus. Elevation of ber and rem to the status of standard units is felt to be premature, in the absence of a standard scale or procedure for reproducing these units or calibrating instruments with them. Yudin's suggestions that the ICRU (International Commission on Radiological Units) term "dose equivalent" be replaced by a new term, "equivalent dose," is rejected as making a distinction where no difference exists, and as defeating the ICRU's efforts to reserve the noun "dose"

Card 1/2

UDC: 577.391(017)

ACC NR: AP7000130

to denote "absorbed dose." There is likewise no need to invent a special new unit, the "equivalent rad," to express dose equivalent (Yudin's "equivalent dose"), since the units ~~ber~~ and ~~rem~~ already exist for this purpose. [DP]

SUB CODE: 18, 06/ SUBM DATE: 10Aug66/ ORIG REF: 003/ OTH REF: 001/
ATD PRESS: 5110

ISAYEV, B.N.

Ufa petroleum workers at the Orsk and Gur'yev petroleum refining plants. Neftianik 2 no.1:11-13 Ja '57. (MLRA 10:2)

1. Zamestitel' glavnogo mekhanika Ufimskogo ordena Lenina neftepererabatyvayushchego zavoda.
(Orsk--Petroleum--Refining) (Gur'yev--Petroleum--Refining)

ISAYEV, B.N.

Ufa petroleum workers are mechanizing repair operations. Neftianik
2 no.1:26 Ja '57. (MLRA 10:2)

1. Zamestitel' glavnogo mekhanika Ufimskogo ordena Lenina neftepere-
rabatyvayushchego zavoda.
(Ufa--Petroleum--Refining)

MAKOGON, I.Ye.; ISAYEV, B.P.; IL'ICHEV, V.I.

Redesign of the ejection assembly of a CM 143 press. Ogneupory
30 no.9:43-44 '65. (MIRA 18:9)

1. Belokamenskiy shamotnyy zavod.

ISAYEV, B.U.

Effect of the thymus gland on the development of some
organs in lambs. Izv. AN Kazakh. SSR. Ser. biol. nauk
3 no.4:99-103 JI-Ag '65. (MIRA 18:11)

ISAYEV, B.U.

Function of the thyroid gland in lambs. Izv. AN Kazakh. SSR.
Ser. biol. nauk 3 no.2:90-95 Mr-Apr '65. (MIRA 18:5)

ISAYEV, B.U.

Age morphology of the thymus gland. Izv. AN Kazakh. SSR. Ser. biol.
nauk no.2:90-93 '63. (MIRA 17:10)

ISAYEV, B.U.

Age-related micromorphology of the thymus gland in sheep.
Izv. AN Kazakh. SSR. Ser. biol. nauk 2 no.6:78-82 N-D '64.
(MIRA 18:3)

ISAYEV, D.

Morphology of Kek-Ala-Chap. Izv. AN Kir. SSR. est. i tekhn. nauk 4 no.4:
75-78 '62. (MIRA 16:4)

(Tien Shan—Geomorphology)

ISAYEV, D. (Odessa)

At the sources of cooperation. Sov. profsoiuzy 20 no.3:33
F '64. (MIRA 17:3)

ABDULLAYEV, A.A., kand.tekhn.nauk; NABIYEV, I.A., kand.tekhn.nauk; DEZHAYDOV,
A.A., inzh.; ISAYEV, D.G., inzh.; YUSIFOV, A.A., inzh.

Converter of the time-pulse telemetering system with electric
power compensation. Mekh. i avtom.proizv. 19 no.3:15-17 Mr '65.
(MIRA 18:4)

ISAYEV, D.I.

"Swamps of the Northern Kirgiz." Cand Geog Sci, Kirgiz State
U, Frunze, 1955. (KL, No 10, Mar 55)

SO: Sum. No. 670, 29 Sep 55-Survey of Scientific and Technical
Dissertations Defended at USSR Higher Educational Institutions (15)

DRUZHININ, I.G., akademik; ISAYEV, D.I., kand.geograf.nauk

Peat deposits of the Kirghiz S.S.R. Zbor.st.po izuch.torf.fonda
no.2:147-156 '57. (MIRA 11:8)

1.AN Kirgizskoy SSR (for Drushinin). 2. Kirgizskiy gosudarstvennyy
universitet (for Isayev).
(Kirghizistan--Peat)

ISAYEV, D.I.

Classification of marsh areas of southern Kirghizia. Trudy
Otd.geog.i Tian.fiz.-geog.sta.AN Kir.SSR no.1:59-66 '58.
(MIRA 12:2)
(Kirghizistan--Swamps)

ISAYEV, D.I.; DRUZHININ, I.G.

Peat bogs in the Kirghiz S.S.R. Trudy Otd.geog.i Tian.fiz.-
geog.sta.AN Kir.SSR no.1:67-75 '58. (MIRA 12:2)
(Kirghizistan--Peat bogs)

ISAYEV, D.I.

Karst phenomena in the eastern part of the Terskei Ala-Tau.
Trudy Otd.geog.i Tian.fiz.-geog.sta.AN Kir.SSR no.1:161 '58.
(MIRA 12:2)

(Terskei Ala-Tau--Karst)

ISAYEV, D.I.

Plant of the geomorphological division of Kirghizistan. Izv. AN
Kir. SSR. Ser. est. i tekhn. nauk i no.2:13-19 '59. (MIRA13:9)
(Kirghizistan--Physical geography)

ISAYEV, D.I.

On the morphology of the Ketmen-Tyube depression. Izv. AN Kir.
SSR. Ser. est. i tekhn. nauk 1 no.2:35-41 '59. (MIRA 13:9)
(Ketmen-Tyube region--Geology, Structural)

ISAYEV, D. I.

Oligotrophic wet meadows of the Sarydzhaz. Izv. AN Kir. SSR.
Ser. est. i tekhn. nauk 1 no.2:105-106 '59. (MIRA 13:9)
(Sarydzhaz Valley--Pastures and meadows)

BOL'SHAKOV, M.N.; VYKHODTSEV, I.V., doktor biol. nauk; NIKITINA, Ye.V., kand. biol. nauk; ZABIROV, R.D., kand. geogr. nauk; ISAYEV, D.I., kand. geogr. nauk; KASHIRIN, F.T.; KOROLEV, V.G., kand. geol.-miner. nauk; LUNIN, B.A., kand. geogr. nauk; MAMYTOV, A.M., akademik; OTORBAYEV, K.O., kand. geogr. nauk; RYAZANTSEVA, Z.A., kand. geogr. nauk, st. nauchn. sotr.; UMURZAKOV, S.U.; YANUSHEVICH, A.I.; BLAGOOBRAZOV, V.A., red.; BEYSHENOV, A., tekhn. red.

[The nature of Kirghizistan; brief characteristic of its physical geography] Priroda Kirgizii; kratkaia fiziko-geograficheskaya kharakteristika. Frunze, Kirgizskoe gos. izd-vo, 1962. 296 p. (MIRA 16:7)

1. Geograficheskoye obshchestvo SSSR. Kirgizskiy filial.
2. Zaveduyushchiy Otdelom geografii AN Kirgizskoy SSR, predsedatel' Kirgizskogo filiala Geograficheskogo obshchestva SSSR (for Otorbayev).
3. Dekan geograficheskogo fakul'teta Kirgizskogo gosudarstvennogo universiteta (for Umurzakov).
4. Zamestitel' direktora instituta geologii AN Kirgizskoy SSR (for Korolev).
5. Rukovoditel' sektora geomorfologii Otdela geografii AN Kirgizskoy SSR (for Isayev).
6. Chlen-korrespondent, zaveduyushchiy sektorom Instituta geologii AN Kirgizskoy SSR (for Kashirin).

(Continued on next card)

BOL'SHAKOV, M.N.---(continued). Card 2.

7. Direktor Tyan-Shan'skoy vysokogornoy fiziko-geograficheskoy stantsii Otdela geografii AN Kirgizskoy SSR (for Zabiroy).
 8. Otdel geografii AN Kirgizskoy SSR (for Ryazantseva).
 9. Chlen-korrespondent, direktor Instituta energetiki i vodnogo khozyaystva AN Kirgizskoy SSR (for Bol'shakov).
 10. Zaveduyushchiy Otdelom pochvovedeniya AN Kirgizskoy SSR (for Mamytov).
 11. Chlen-korrespondent, vitseprezident AN Kirgizskoy SSR (for Yanushevich).
 12. Zaveduyushchiy kafedroy fizicheskoy geografii Kirgizskogo gosudarstvennogo universiteta (for Lunin).
- (Kirghizistan--Physical geography)

ISAYEV, D. I.

Geomorphologic regionalization of Kirghizistan. Izv. Kir. fil.
Geog. ob-va SSSR no.3:103-109 '62. (MIRA 15:10)

(Kirghizistan—Geomorphology)

ISAYEV, D.I.; GLUSHKOVA, M.I.; ALIYEV, Z.A.; DANILINA, A.P.;
TOKOMBAYEV, Sh.T.

[Relief of Kirghizia] Rel'ef Kirgizii. Frunze, Izd-vo
"Ilim," 1964. 144 p. (MIRA 18:1)

1. Akademiya nauk Kirgizskoy SSR, Frunze. Otdel geografii.

ISAYEV, D.I., otv. red.

[Geographical study of the high altitude depressions of Kirghizistan in connection with developing them; Geograficheskie issledovaniia vysokogornyykh vpadin Kirgizii v svyazi s ikh osvoeniem. Frunze, Ilim, 1965. 151 p. (MIRA 18:3)]

1. Akademiya nauk Kirgizskoy SSR, Frunze. Otdel geografii.

ISAYEV, D. I.

137-58-4-6825

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 4, p 73 (USSR;

AUTHOR: Isayev, D. I.

TITLE: Cleaning Lead Shaft Furnace Gases by High-speed Dust Catchers (Ochistka gazov shakhtnykh pechey svintsovoy plavki v skorostnykh pyleulovitelyakh)

PERIODICAL: Byul. tsvetn. metallurgii, 1957, Nr 13, pp 22-26

ABSTRACT: A description of the design, and of the output criteria of an installation of high-speed dust catchers (HD) at the Chimkent Lead Plant is presented. Shaft-furnace gases are cleansed of dust in the HD battery. 150,000 m³ dust-laden gases per hour, having a temperature of 1500°, enter the HD scrubber (inside diameter 6 m, height of cylindrical portion 12 m). In the scrubber the gases are cooled to 38-62° and undergo partial precipitation of the dust (appx. 35% on the average). Precooling and moistening of the gases increases the DC efficiency. From the scrubber the gases go to 4 high-speed atomizers (throat diameter 360 mm). Water delivery to the atomizer is radial and axial. The high-speed atomizers are connected with direct-flow cyclones (inside diameter 1.3 m). From the cyclones the gases go to 2

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137-58-4-6825

Cleaning Lead Shaft Furnace Gases by High-speed Dust Catchers

exhausters and are expelled (into the atmosphere. The best results in dust catching are attained when the gas velocity in the atomizer nozzle is 80-95 m/sec, and the water consumption on irrigation is 0.6-0.8 liters per nm^3 , the hydraulic resistance of the atomizer being 400-500 mm H_2O . The HD installation operates at a steady 95-97% efficiency. The dust content of the scrubbed gases is $< 0.25 \text{ g/nm}^3$. Operational difficulties were encountered in using the HD, as the convergent duct of the atomizer and certain other parts of the equipment clog with slime.

G.G.

1. Furnaces--Maintenance
2. Dust--Reduction
3. Equipment--Design
4. Equipment--Operation

Card 2/2

ISAYEV, D. K., CHURAYEV, N. V., MEMOLVIN, N. S.

Excavating Machinery

Small capacity pump-crane for liquid peat, TMG-350. Tekst.rpom 12, No. 9, 1952.

9. Monthly List of Russian Accessions, Library of Congress, December 1952. Unclassified.
2

1. ISAYEV, D.K., NEMOLVIN, N.S., CHURAYEV, N.V.

2. USSR (600)

4. Peat Industry

7. Investigating the work of a peat suction crane of a small hydraulic peat machine model TMG-350. Torf. prom. 29 no. 11 1952

9. Monthly List of Russian Accessions, Library of Congress, February 1953, Uncl.

USSR/Human and Animal Physiology. The Nervous System

T-12

Abs Jour : Ref Zhur - Biol., No 14, 1958, No 65700

Author : Iscayev D.N.

Inst : Leningrad Scientific Society of Neuropathologists and Psychiatrists

Title : An Adaptometric Study of the Visual Analyzer in Children with Different Forms of Epilepsy

Orig Pub : Sb. tr. Leningr. nauchn. o-va nevropatol. i psikhiatrov, 1957, vyp. I, 35-40

Abstract : In comparison with normal values, there was noted in children with epilepsy a low initial level of dark adaptation (10 to 20 seconds following illumination), reduced rate of development of light sensitivity (general inactivity of nervous processes, the predominance of inhibition), and a change in light sensitivity dependent upon the subject's condition. When the course of the illness was slow (23 cases), the horizontal portion of the "adaptogram" was more stable than normal, and the changes in results from experiment

Card : 1/2

Psychiatric Clinic, Leningrad Pediatric Med. Inst.

ISAYEV, D.N. Cand Med Sci--(diss) "Adaptometric study of certain neuro-
dynamic peculiarities in children with various forms of ~~epile~~-convulsive
Conditions
~~status~~." Len, 1958. 22 pp (Len Pediatric Med Inst), 250 copies.
(M, 31-58, 107)

-1/2-

ISAYEV, D.N.

Adaptometric study of some neurodynamic peculiarities in children with various forms of epileptic conditions. Sbor. trud. Len. nauchn. ob-va nevr. i psikh. no.6:329-330 '59. (MIRA 13:12)

1. Iz kafedry psikiatrii Peditricheskogo meditsinskogo instituta (zav. - prof. S.S. Mnukhin). (EPILEPSY) (NERVOUS SYSTEM—DISEASES)

ISAYEV, D.N.

Some peculiarities of the course of influenzal psychoses in children.
Zhur.nevr.i psikh. 60 no.7:872-875 '60. (MIRA 14:1)

1. Kafedra psikiatrii (zav. - prof. S.S. Mnukhin) Pediatricheskogo
meditsinskogo instituta 1-y Psikhonevrologicheskoy bol'nitsy (glavnyy
vrach D.N. Isayev), Leningrad.
(INFLUENZA) (PSYCHOSES)

ISAYEV, D.N.

Studies on dark visual adaptation as a method for neurodynamic studies in some neuropsychiatric diseases in children. Vop.psikh.i nerv. 8:315-319 '62. (MIRA 17:4)

1. Iz kafedry psikhii Leningradskogo pediatricheskogo meditsinskogo instituta (zav. kafedroy prof. S.S.Mnukhin).

AFANAS'YEVA, Ye.V.; MILEVSKAYA, I.N.; ISAYEV, D.N.

Systematized formation of delirium in adolescents. Zhur.nevr.1
psikh. 62 no.7:1038-1043 '62. (MIRA 15:9)

1. Kafedra psikhiatrii (zav. - prof. S.S.Mnukhin) Leningradskogo
pediatricheskogo meditsinskogo instituta.
(DELIRIUM) (PERSONALITY, DISORDERS OF)

ANFILOV, A.A., inzh.; BAKALEYNIK, Ya.M., inzh.; BIRGER, G.I.,
inzh.; BRUK, B.S., inzh.; BUROV, A.I., inzh.; GINZBURG, V.L.,
inzh.; ZABELIN, V.L., inzh.; ZAPLECHNYI, Ye.G., inzh.; ISAYEV,
D.V., inzh.; KLIMOVITSKIY, A.M., inzh.; KRYUCHKOV, V.V., inzh.;
KOTOV, V.A., inzh.; LEYDERMAN, A.Ye., inzh.; PODGOYETSKIY,
M.L., inzh.; SAZHAYEV, V.G., inzh.; SEVAST'YANOV, V.V., inzh.;
FILIPPOV, S.F., inzh.; FROMBERG, A.B., inzh.; SHNEYEROV, M.S.,
inzh.; ERLIKH, G.M., inzh.; VERKHOVSKIY, B.I., red.; ZUBKOV,
G.A., red.; KARKLINA, T.O., red.; OVCHARENKO, Ye.Ya., red.;
ANTONOV, B.I., ved. red.

[New means of automatic and centralized control for nonfer-
rous metal mines] Novye sredstva avtomatizatsii i dispetcher-
skogo upravleniia dlia rudnikov tsvetnoi metallurgii. Moskva,
Nedra, 1965. 93 p. (MIRA 18:4)

ISAYEV D.V.

SOV/136-58-6-3/21

AUTHORS: Averbukh, M.A., Burnashev, A.A., Birger, G.I., Baysh, L.G.,
Zubkov, G.A., Zhiryakov, N.I., Isayev, D.V., Ovcharenko,
Ye.Ya., Fromberg, A.B. and Shneyerov, H.S.

TITLE: New Means for Automatic Testing and Control in Non-
ferrous Metallurgy (Novyye sredstva avtomaticheskogo
kontrolya i regulirovaniya v tsvetnoy metallurgii)

PERIODICAL: Tsvetnyye Metally, 1958, Nr 6, pp 15 - 25 (USSR)

ABSTRACT: Many processes in non-ferrous metallurgy involve corrosive
media and the Konstruktorskoye byuro (Design Bureau)
Tsvetmetavtomatika (KB TsMA) have since 1955 been working
on pneumatic control methods, which are especially
suitable for such conditions. Other organisations named
by the authors as some of those working in the same
field are: Institut avtomatiki i telemekhaniki AN SSSR
(Institute of Automation and Telemechanics of the Ac.
Sc. USSR), NIITeplopribor, TsLA of the "Energochermet"
Trust and the "Tizpribor" Works. A wide range (Table 1)
is covered by the pneumatic transducers, produced by
the KB TsMA (Figures 1 and 2) in which use is made of a
corrosion-resistant Soviet plastic. A series of corrosion-
resistant valves have also been produced (Table 2),
including a diaphragm type with a position indicator.

Card 1/3

SOV/136-58-6-3/21

New Means for Automatic Testing and Control in Non-ferrous Metallurgy

(Figure 3). For the continuous analysis of hydro-metallurgical solutions, the KB TsMA in 1957 developed (Figure 4) an automatic polarographic concentration-meter, type KAP-225, with a transducer type DAPK-226; this device has been successfully used at the "Elektrotsink" Works for analysing for cadmium in zinc electrolyte and is based on alternating-current polarography. The KB TsMA have developed a series of radioactive methods, particularly for level indication over a wide (type URP) (Figure 5) and a relatively narrow (type URPR) (Figure 6) range. A radioactive density-meter, type PR-150, independent of the mineralogical and size composition of pulp over a wide range has been successfully tested at the Zolotushinskaya obogatitel'naya fabrika (Zolotushinskaya Beneficiation Works) (ranges 1.5-2.5 and 1-2 kg/litre). Work is proceeding on other radioactive meter including a moisture meter, for concentrates and similar materials. Based on a corrosion-resistant, differential, thermoelectric anemometer (electrical circuit proposed by engineers V.A. Drozdov and A.M. Listov), a flowmeter for pure or air-diluted chlorine has been developed by the

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SOV/136-58-6-3/21

New Means for Automatic Testing and Control in Non-ferrous Metallurgy

KB TsMA; they have also developed an analyser (type GAKh-239) for chlorine which is accurate to $\pm 3\%$ and these two instruments are to be used in an integrated automation system being devised for the magnesium industry. The KB TsMA have developed an automatic installation for (Figures 7 and 8) controlling a single pump in relation to the liquid level. Another recent activity of this organisation has been the development of the type ATV-229 overheating protective device (Figure 9) and a twelve-point temperature signalling device (Figure 10). The ATV-229 device is to be produced by the Tsvetmetpribor Works. In collaboration with the Institut gigiyeny truda i profzabolavaniy AMN SSSR (Institute of Work Hygiene and Occupational Diseases of the AMS USSR), the KB TsMA have developed a device (Figure 11) for continuous measurement and recording of mercury-vapour concentration in air in the range 0.1 - 0.6 mg/m³. This instrument (IKRPO445) (Figure 11) also gives an alarm signal if the concentration becomes excessive and its range is being extended in both directions.

Card 3/3

18.1000, 18.8400

65686

SOV/136-59-10-3/18

AUTHOR: Isayev, D.V.

TITLE: Indicator of the Presence of Ore on Conveying Equipment

PERIODICAL: Tsvetnyye metally, 1959, Nr 10, pp 19-21 (USSR)

ABSTRACT: In 1958-1959, the KB TsMA developed an automatic device to show the presence of ore, concentrate or mix on belt and other conveyors. The author examines a number of detectors (contact and non-contact) developed for this purpose by research institutes and industrial enterprises. The Mekhanobr-institute weight indicator is based on the ordinary belt weigher but is complicated and unsuitable. The Yerevanskiy institut gornogo dela (Yerevan Mining Institute) have utilized Co⁶⁰ radiation but the device is potentially unsafe, expensive and involves a complicated electrical circuit. A high-frequency generator and capacity element are used in a device developed by the Dnepropetrovskiy zavod selenovyykh vypriamitel'nykh (Dnepropetrovsk Selenium-Rectifiers Works): this device is complicated and sensitive to radio interference. The KB TsMA decided to adopt a contact type electrode which is suitable for most types of ores. The type

Card 1/2

ES-1000 electronic indicator previously developed by the

65686

SCV/136-59-10-3/18

Indicator of the Presence of Ore on Conveying Equipment

organization was modified, in the light of full-scale test results, by the introduction of a time-delay (to avoid operation when large ore lumps cause temporary loss of contact by the electrode). The circuit of the new indicator (called ES-1011) is shown in Fig 1. A type DE-63 electrode element (Fig 2) was selected for the detector, a flexible cable electrode 8 to 10 mm in diameter suspended from an insulating support being found to have sufficiently high resistance to wear. The complete indicator behaved well in tests, an experimental model is in operation at the Mizurskaya obogatitel'naya fabrika and a further batch are being prepared. There are 2 figures.

ASSOCIATION:KB „Tsvetmetavtomatika„

Card 2/2

ISAYEV, D.V.

Level indicators for liquids and pulps. Sbor.mat.po avtom.proizv.
prots.i disp. no.5:43-51 '60. (MIRA 14:4)

1. Konstruktorskoye byuro "TSvetmetavtomatika."
(Liquid level indicators)

L 54587-55 EWT(d)/ENA(d)/ENP(v)/ENP(k)/ENP(h)/ENP(l) Pf-4 GS
 ACCESSION NR: AT5009810 UR/0000/64/001/000/0146/0152

AUTHOR: Bormotina, T. S. (Moscow); Isayev, D. V. (Moscow);
Karro, V. A. (Moscow)

22
 19
 841

TITLE: Contactless logical elements and experience with their industrial use

SOURCE: Vsesoyuznaya konferentsiya po avtomaticheskomu kontrolyu i metodam
elektricheskikh izmereniy. 4th, Novosibirsk, 1962. Avtomaticheskoy kontrol' i
metody elektricheskikh izmereniy; trudy konferentsii, t. 1: Metody elektricheskikh
izmereniy. Tsifrovyye izmeritel'nyye pribory. Elementy izmeritel'nykh
sistem (Automatic control and electrical measuring techniques; transactions of
the conference, v. 1: Electrical measuring techniques. Digital measuring
instruments. Elements of measurement systems). Novosibirsk, Redizdat Sib.
otd. AN SSSR, 1964, 146-152

TOPIC TAGS: logical element, contactless logical element

ABSTRACT: The development of standard-design, potential-type transistor and ferrite-transistor logical elements is reported. The elements are designed for +15 +50C ambient temperature; they can be combined to realize AND, OR, NOT,

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ACCESSION NR: AT5009810

and inversion functions. Diodes introduced between the potential elements isolate them from each other. Input current, 3.3 ma; open-transistor current, 24 ma; switching time, 4 μ sec. The ferrite-transistor element is designed for 6 recordings or 15 readings in other elements. Ge transistor output units also developed can control 96 w at a supply voltage of 24 v and 192 w at 48 v, with an efficiency of 97-99%. The ferrite-transistor elements were used in an automatic control system developed for a Duo-800 hot-rolling mill; no malfunction attributable to noise was recorded during the entire period (from Jan 61) of testing and trial operation of the control system. The potential transistor elements were used in an automatic precise-stopping system for a Quarto-2800 reversing cold-rolling mill. Orig. art. has: 5 figures.

ASSOCIATION: Tsvetmetavtomatika (Nonferrous Metal Automation Design Bureau)

SUBMITTED: 25Sep64

ENCL: 00

SUE CODE: DP

NO REF SOV: 004

OTHER: 000

Card 2/2

IMANOV, I.M.; KADIMAKH, Ch.O.; ISAYEV, Dzh.

Microwave band spectrum of $\text{CH}_3\text{CH}_2\text{OH}$ and CH_3CHDOH molecules.
Izv. AN Azerb. SSR. Ser. fiz.-tekh. i mat. ~~nauk~~ no.2:62-67
'65. (MIRA 18:8)

IMANOV, L.M.; KADZHAR, Ch.O.; ISAYEV, I.Dzh.

Microwave rotational spectrum of $\text{CD}_3\text{CD}_2\text{OD}$ and $\text{CD}_3\text{CD}_2\text{OH}$ molecules.
Opt. i spektr. 18 no.5:904-905 My '65.

(MIRA 18:10)

ISAYEV, E.A.; PLATONOV, S.A., polkovnik, red.; CHAPAYEVA, R.I.,
tekhn. red.

[Transistorized voltage converters] Poluprovodnikovye
preobrazovateli napriazheniia. Moskva, Voenisdat, 1962.
109 p. (Transistor circuits) (MIRA 16:4)
(Electric current converters)

ISAYEV, Emmanuil Aronovich; MEL'NIKOVA: Zh.M., red.

[Image on a magnetic tape] Izobrazhenie na magnitnoi
lente. Moskva, Znanie, 1964. 15 p. (Novoe v zhizni,
nauke, tekhnike. IV Seriya: Tekhnika, no.24)
(MIRA 17:11)

Isayev, F. A.

121

PHASE I BOOK EXPLOITATION

AUTHOR: Artsimovich, A.N.
TITLE: Special Technological Processes in Instrument Manufacture
 (Spetsial'nyye tekhnologicheskiye protsessy v priborostroyeni
PUB. DATA: Gosudarstvennoye soyuznoye izdatel'stvo sudostroitel'noy
 promyshlennosti, Leningrad, 1957, 236 pp., 5,500 copies.
ORIG. AGENCY: None Given
EDITOR: Isayev, F.A.; Responsible Ed.: Kashin, N.V.; Tech. Ed.:
 Kontorovich, A.I.
PURPOSE: The book is intended as a textbook for students in radio
 engineering and electro-mechanical technical schools.
 It may be useful to technologists and forement taking courses
 to increase their qualifications and also helpful to engineers
 and technicians employed by instrument manufacturing
 enterprises.
COVERAGE: The book describes special technological processes which
 may be employed by plants producing instruments and
 equipment. A significant portion of the book is devoted
 to the electrical wiring of equipment, methods of marking
 electrical components, connecting wires and cables.

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Special Technological Processes in Instrument Manufacture (Cont.)

Sufficiently full treatment is given to soldering and brazing, and to modern methods of brazing such as brazing in protective hydrogen atmosphere, high frequency induction brazing, and ultrasonic brazing (aluminum and aluminum alloys). Separate chapters are devoted to the technology of producing ceramic parts, to casting of nonferrous alloys, to investment casting, glueing of metals and nonmetallic materials, etc. The text is illustrated with detailed data, technical specifications, manufacturing instructions, standards, etc. A list of official specification instructions used in the book is given at the end. There are no references and there is no mention of personalities.

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AVAILABLE: Library of Congress (TK153 .A72)

Card 7/7

SORVACHEV, K.F.; ZADVOROCHNOV, S.F.; ISAYEV, F.A.

Immunization of fishes. Biokhimiia 27 no.2:202-207 Mr-Apr '62.
(MIRA 15:8)

1. Chair of Animal Biochemistry, State University and the All-Russian Institute of Pond and Fish Economy, Moscow.
(FISHES--DISEASES AND PESTS) (IMMUNOHEMATOLOGY)

ISAROT, S.I.

A second model of the electrometric current meter. Trudy Mor.
gidrofiz. inst. AN USSR 31:75-80 '64 (MIRA 18:?)

ISAYEV, F.F.

From the history of the Lubny field pharmacy; historical reference.
Voen.-med.shur.no.9:92-93 S '51. (MLRA 9:9)
(LUBNY-PHARMACY, MILITARY--HISTORY)

ISAYEV, F.F. (Khar'kov)

History of health education in the Red Army: Southern front 1919.

Sov.zdrav. 17 no.2:47-52 P '58.

(MIRA 13:1)

(MEDICINE, MILITARY AND NAVAL, hist.
in Russia (Rus))

KHALILOV, A.Kh.; ISAYEV, F.K.

Studying excitation and absorption spectra of crystalline phosphors
containing various anions of the activating admixture and the base.
Izv. AN Azerb. SSR. Ser. fiz.-mat. i tekhn. nauk, no.3:45-52 '59
(Phosphors--Spectra) (MIRA 13:3)

500

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S/081/61/000/023/002/061
B108/B147

AUTHORS: Khalilov, A. Kh., Isayev, F. K.

TITLE: Comprehensive study of the effect of activator anions upon the optical properties of alkali-halide crystal phosphors

PERIODICAL: Referativnyy zhurnal. Khimiya, no 23, 1961, 32, abstract 23B216 (Izv. AN AzerbSSR. Ser. fiz.-matem. i tekhn. n., no. 1, 1961, 61 - 71)

TEXT: This is a comprehensive study of the effects of various salts of an activator on the fluorescence spectra, the excitation of fluorescence, and on the curves of thermal and thermo-optical emission from KCL and KI phosphors. The results lead to the conclusion that if, besides Cl^- and I^- anions, Cu^+ activator ions are present in the KCL lattice, these Cu^+ ions tend to accumulate at the I^- anions and to form complex luminescence centers with them. Among the Cl^- , Br^- , and I^- anions, the I^- ions obviously play the most important part in the formation of trapping centers through alkali-metal halides in phosphors. [Abstracter's note: Complete Card 1/2]

Comprehensive study of the effect of ...
translation.]

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B108/B147

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S/OH8/61/025/003/009/0h7
B10h/B201

24,3500(1137,1138,1395)

AUTHORS:

Khalilov, A.Kh., Salayev, E.Yu., Mamedov, A.P.,
Aliyeva, T.D., and Isayev, F.K.

TITLE:

Comprehensive study of optical and thermo-optical properties
of polyactivated alkali halide crystal phosphors

PERIODICAL:

Izvestiya Akademii nauk SSSR. Seriya fizicheskaya,
v. 25, no. 3, 1961, 335 - 340

TEXT: This is a reproduction of a lecture delivered at the 9th Conference
on Luminescence (Crystal Phosphors), which took place in Kiyev from June
20 to 25, 1960. The authors present results of a study of the excitation
spectra of the luminescence bands and the spectral composition, fluore-
scence, phosphorescence, and thermal de-excitation, as well as of the inner
extinction of visible and ultraviolet luminescence. Comprehensive results
are given in Figs. 1 and 2, and in Table 1. The single crystals were bred
from a melt by Kiropulos' method (with activator concentrations in the
melt between 0.01 and 1 mole%). The spectra were measured with a spectro-
meter containing two monochromators. A sensitizing effect of Ag^{+} and

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