

KWOCZYŃSKI, Jan, loc. dr. med; KARLINSKI, Andrzej; FALENGIK, Maria

Localization of the systolic sound by means of esophageal microphone. Pol.tyg. lek. 20 no.7:251-253 15 F'65.

1. Z I Oddziału Chorob Wewnętrznych Instytutu Reumatologicznego (kierownik Oddziału: doc. dr. med. Jan Kwoczyński; dyrektor Instytutu: dr. med. Włodzimierz Bruhl).

ZOLCINSKI, Adam; KWOCZYNSKI, Marian, dr. med.; RZUCIDLO, Zbigniew

Leukoplakia of the vaginal portion of the uterus and its clinical evaluation. Ginek. Pol. 36 no.7:779-784 J1'65.

1. Z I Kliniki Położnictwa i Chorob Kobietych Akademii Medycznej we Wrocławiu (Kierownik: prof. dr. med. K. Nowosad) i z Centralnej Wojewódzkiej Przychodni Onkologicznej (Kierownik: dr. med. M. Kwoczyński).

KWOCZYNSKI, Marian Zbigniew

Diagnosis of cytological changes leading irreversibly to the formation of cancer of the cervix uteri (statistical analysis).  
Ginek. Pol. 36 no.8:909-912 Ag '65.

1. 2 I Kliniki Położnictwa i Chorob Kobietych Akademii Medycyny we Wrocławiu (Kierownik: prof. dr. med. K. Nowosad) i w Wojewódzkiej Poradni Onkologicznej we Wrocławiu (Kierownik: dr. med. M.Z. Kwoczynski).

KWOCZYNSKI, Marian; ROZEN, Filip

Difficulties in diagnosis of preinvasive cancer of the vaginal part of the uterus. Gin. polska 28 no.5:579-584 Sept-Oct 56.

1. Z I Kliniki Poloznictwa i Chorob Kobietych AM we Wroclawiu  
Kierownik: doc. dr. K. Nowosad, Z Wof. Poradni Onkologicznej  
we Wroclawiu Kierownik: M. Kwoczynski, Dr. Marian Kwoczynski--  
Wroclaw, Plac Staszica 42 m. 3.  
(CERVIX NEOPLASMS, diagnosis  
preinvasive cancer, difficulties (Pol))

2

189. Water flooding of water reservoir in Turasowka. 2  
Belger and S. Kwolek. *Nafte (Kraakow)*, 1957, 10, 64-8. The  
particular operation was started in Jan. 1955, and during the  
first 25 months over 21 million cu. ft. has been pumped in.  
As a result some 2210 tons of crude over and above usual  
amounts have been produced. Details of porosity, and  
position of water table, are given.  
M. S.

KWOLEK, Stefan

The exploitation of petroleum and gas in Poland. Wlad naft 6 no.5:  
98-100 My '60. (EEAI 9:10)  
(Poland--Petroleum)  
(Poland--Gas, Natural)

KWOLEK, Stefan; SKARBK, Karol

A geologic characteristic of the petroleum and natural gas deposit  
in the Mielec region. Wlad naft 7 no.5:97-99 My '61.

(EEAI 10:9)

(Petroleum) (Gas, Natural)

SZOTOMA, Irena; KRAKOWIAN, Halina; KWOLEK, Zbigniew; POTOCZEK, Stanislaw

Caries of the teeth of the maxilla and mandible in students at  
Wroclaw. Czas. stomat. 18 no.3:221-224 Mr '65.

1. Z Katedry Stomatologii Zachowawczej Akademii Medycznej we  
Wroclawiu (Kierownik: dr. med. S. Potoczek).



KNOLEK, Zbigniew; KRAKOWIAN, Halina; POTOCZEK, Stanislaw; dr. med.;  
SZOTOWA, Irena

The 3d molars in university students in Wroclaw. Czas. stomat.  
18 no.4:383-387 Ap'65.

~1. Z Katedry Stomatologii Zachowawczej Akademii Medycznej we  
Wroclawiu (Kierownik: dr. med. S. Potoczek).

SPINU, I.; BALDOVIN-AGAPI, Coralia; BIRZU, I.; MIHALCO, Florica; ROMAN, V.  
ROMAN, Stela; BORSAL, Leia; TOMESCO, Elena; KY, Tran

Distribution, according to phage groups and antibiotic sensitivity,  
of pathogenic strains of staphylococci isolated in North Vietnam.  
Arch. roum. path. exp. microbiol 21 no.1:143-153 Mr '62.

1: Travail du Ministère de la Sante et des Prevoynances Sociales,  
Direction Generale Sanitaire Antiepidemique, de l'Institut, "Dr.  
I. Cantacuzino" -Service des Cocci Pathogenes et de l'Institut de  
Microbiologie de Hanoi.

(STAPHYLOCOCCUS) (ANTIBIOTICS) (DRUG RESISTANCE, MICROBIAL)

KYABOVA, Ye. V.

USSR/Physics - Elasticity Theory Oct 53

"Transverse Blow With Variable Velocity on an Elastic String," Ye. V. Kyabova, Chair of Elasticity Theory

Vest Mos Univ, Ser Fizikommat i Yest Nauk, No 7, pp 85-91

States that Kh. A. Rakhmatulin ("Propagation of the Load-Removal Wave," Zhur Prik Mat i Mekh, Vol 9, No 1, 1945; "Slanting Blow on a Flexible String with Large Velocities in the Case of Friction," ibid. Vol 9, No 6, 1945) was the first to propose and solve the problem of the blow on an elastic

273T93

string by a material point of infinitely large mass or, what is the same, the blow of a material point on a string with const velocity. Here the authoress discusses the case of finite mass (i.e. variable velocity). Refers to related work of Kh. A. Rakhmatulin in Uchenyye Zapiski MGU (Sci Notes of Moscow State U), Vol 4, No 153, 1951.

~~K'YACHENKO, P.V.~~

A device for checking manual anemometers. Trudy GGO no.61:105-114  
'56. (MLRA 10:7)

(Anemometer)

KYADARYAN, K.A.

USSR/Morphology of Man and Animals - (Normal and Pathologic).  
Circulatory System.

S-4

Abs Jour : Ref Zhur - Biol., No 3, 10 February 1958, 12445

Author : Kyadaryan, K.A.

Inst :

Title : The Right-Sided Aortic Arch.

Orig Pub : Klinich. meditsina, 1955, 33, No 6, 75-79

Abstract : No abstract.

Card 1/1

S/613/61/000/014/011/019  
D207/D303

AUTHOR: Kyaembre, Kh. F.

TITLE: Photostimulated electron emission from alkali-halide crystals excited by ultraviolet radiation

SOURCE: Akademiya nauk Estonskoy SSR. Institut fiziki i astronomii. Trudy. No. 14, 1961. Issledovaniya po lyuminestsentsii, 247-259

TEXT: The author studied exoelectron emission of KBr and KCl:Tl crystals excited by ultraviolet radiation and de-excited by visible light. The main results were presented at the Ninth All-Union Conference on Luminescence held in Kiyev in June, 1960. KBr was irradiated with ultraviolet in the exciton absorption region and KCl:Tl in the region of the  $1S_0 \rightarrow 1P_1$  transition in Tl<sup>+</sup>. Ultraviolet

radiation was obtained from a condensed spark between Al, Zn or Cu electrodes. After excitation the crystals were kept in darkness for a short time [Abstractor's note: Not specified in the text]

Card 1/3

Photostimulated electron ...

S/613/61/000/014/011/019  
D207/D303

and then subjected to visible-light de-excitation ("stimulation") which produced exoelectron emission. Visible light was obtained from a 30 W lamp and the required wavelengths were selected with a  $\Upsilon M-2$  (UM-2) monochromator. A Geiger counter was used to measure electron emission; it had a central Pt wire electrode of 0.1 mm diameter with a 0.35 mm diameter ball at the end. 2800 V was applied to the wire from dry batteries 330-ЭВМЦП-1000 (330-EVMTsG-1000). Pulses were amplified with a БГЦ (BGS) unit of a Б-2 (B-2) meter; they were counted with a ratemeter of Tyul'pan type and recorded with a ЭПН-09 (EPP-09) automatic recorder. Pulses were monitored on a  $CH-1$  (SI-1) oscillograph. The distance between the ball at the end of the counter wire and the crystal was about 3 mm. Excitation and stimulation (de-excitation) spectra of exoelectron emission were recorded. The excitation and stimulation spectra represent here the exoelectron emission intensity, divided by the intensity of the exciting or stimulating radiation, and plotted against the exciting or stimulating wavelength. The results obtained showed clearly that electrons were emitted from surface F-centers by direct optical ionization of these centers. The exoelectron

Card 2/3

Photostimulated electron ...

S/613/61/000/014/011/019  
D207/D303

emission on excitation of  $Tl^+$  in  $KCl:Tl$  confirmed that phosphorescence of  $KCl:Tl^+$  is of recombination type. Acknowledgments are made to Ch. B. Lushchik, who directed this work, and to A. Bogun for advice on constructing the Geiger counter. There are 2 figures and 43 references: 24 Soviet-bloc and 19 non-Soviet-bloc. The 4 most recent references to the English-language publications read as follows: E. Taft and L. Apker, *Phys. Rev.*, 83, 479 (1951); H. R. Philipp and E. A. Taft, *Phys. Rev.*, 106, 671 (1957); Ch. B. Lushchik, "Color centers in alkali halides", International Symposium, Oregon, 29 (1959); J. Ewles and R. Joshi, *Proc. Roy. Soc.*, 254A, 358 (1960).

SUBMITTED: August 6, 1960

Card 3/3



243500

38161  
S/058/62/000/004/050/160  
A058/A101

AUTHOR: Kyaembre, Kh.

TITLE: Photostimulated electron emission from KCl-In phosphors

PERIODICAL: Referativnyy zhurnal, Fizika, no. 4, 1962, 52, abstract 4V389  
("Tr. In-ta fiz. i astron. AN EstSSR", 1961, no. 14, 286-288)

TEXT: After excitation of KCl-In phosphors in the region of the  $^1S_0 - ^1P_1$  band of activator absorption, photostimulated electron emission was detected. Excitation of pure KCl single crystals in this region virtually does not give rise to the effect. The excitation spectrum of photostimulated electron emission of KCl-In evinces a maximum which coincides, within the range of the measurement error, with the  $^1S_0 - ^1P_1$  absorption band of  $In^+$  centers, and which is absent in pure KCl. The similarity of the spectral characteristics of the excitation of photostimulated electron emission and the recombination luminescence of KCl-In (as well as KCl-Tl) phosphors attests to the n-type (rather than p-type) mode of recombination luminescence. f

V. Kosikhin

[Abstracter's note: Complete translation]

Card 1/1

41058

S/058/62/000/008/048/134  
A061/A101

247700

AUTHORS: Tlyslar, E. S., Kyaembre, I. F.

TITLE: On the photostimulated conductivity of KBr and KBr-In

PERIODICAL: Referativnyy zhurnal, Fizika, no. 8, 1962, 43, abstract 8V301  
("Tr. In-ta fiz. i astron. AN EstSSR", 1961, no. 15, 212 - 214)

TEXT: The intrinsic photoeffect in KBr and KBr-In crystals was studied through the photostimulated conductivity appearing on illumination of a preliminarily excited crystal by visible light. The excitation spectrum of photostimulated conductivity from F centers for pure KBr encompasses the longwave drop of the exciton absorption band (~195 - 210 m $\mu$ ); in this case, F centers arise as a result of the interaction between excitons and crystal defects. In KCl-In this photostimulated conductivity was detected after intensive irradiation by 2,537- $\text{\AA}$  Hg line, which caused, in the crystal,  $^1S_0 \rightarrow ^1P_1$  electron transitions in the In<sup>+</sup> center. The conclusion is reached that the protracted luminescence of KBr-In is accompanied by photoelectric phenomena and displays the character of an electron recombination luminescence.

[Abstracter's note: Complete translation]

Card 1/1

9.4160  
9.4175  
24.3500 (1138, 1153, 1395)

20839

S/048/6:/025/003/028/047  
B104/B202

AUTHORS: Belkind, A. I. and Kyaembre, Kh. F.

TITLE: Photo- and thermostimulated electron emission from alkali halide crystal phosphors excited by ultraviolet radiation

PERIODICAL: Izvestiya Akademii nauk SSSR. Seriya fizicheskaya, v. 25, no. 3, 1961, 381-383

TEXT: This paper was presented at the 9th conference on luminescence (crystal phosphors), Kiyev, June 20 to 25, 1960. Already in earlier papers the authors used electrical methods instead of absorption and luminescence methods when investigating the mechanism and the kinetics of physical processes causing luminescence and color centers for alkali halide crystals. In these studies the KBr, KCl, NaCl, KBr-Tl, KCl-Tl, and NaCl-Tl crystal phosphors were excited by means of ultraviolet radiation of an Al spark discharge whose individual lines were separated by means of a monochromator. In accordance with western data the contour of the excitation spectrum of the emission of a KBr crystal differs from that of the F-absorption bands, however, it increases into the direction of shorter

Card 1/4

20839

S/048/61/025/003/028/047  
B104/B202

Photo- and thermostimulated electron...

waves with  $h\nu \approx 1.6$  ev. When determining the effect of de-excitation of the visible light on the emission of a photo-excited KBr crystal it was found that photoemission was caused by the F-centers. This is proved by the hypothesis of the direct optical ejection of an electron from the F-center into the vacuum. As may be seen from Fig. 1 the contour of a short-wave activator absorption band is observed in a KCl-Tl phosphor in the spectrum of photostimulated emission and also in the photostimulated F-luminescence band. These activator absorption bands correspond to the  $^1S_0 \longrightarrow ^1P_1$  transitions in the  $Tl^+$ -ions. Also the phosphorescence spectrum has the same form. Hence, direct electric measurement data are available on the recombination mechanism of phosphorescence in the KCl-Tl phosphorus. After excitation of an NaCl-Tl phosphor by means of ultraviolet light in the shortwave activator band also a thermostimulated electron emission can be observed (Fig. 2). The authors found that the stages of thermal decoloration at 420, 440, and 520°K are accompanied by electron emission. The authors infer a surface-type emission and a volume-type absorption from the fact that the stages of thermal decoloration at low temperatures are not accompanied by emission. The close rela-

Card 2/4

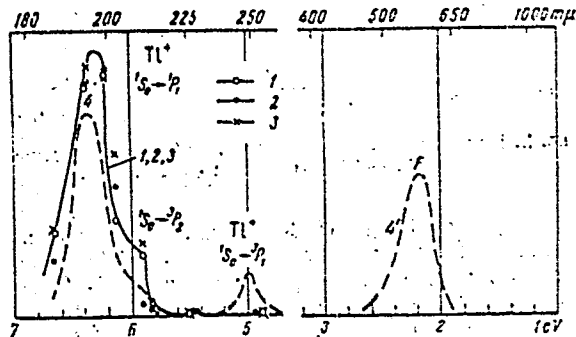
20839  
S/048/61/025/003/029/047  
B104/B202

Photo- and thermostimulated electron...

tion between the maximum of thermostimulated electron emission and thermal decoloration indicates the recombination character of phosphorescence in alkali halide crystals. M. Elango and Ch. B. Lushchik and mentioned. There are 2 figures and 10 references: 5 Soviet-bloc and 2 non-Soviet-bloc.

ASSOCIATION: Institut fiziki i astronomii Akademii nauk ESSR (Institute of Physics and Astronomy of the Academy of Sciences Estonshaya SSR)

Legend to Fig. 1: excitation spectrum of photostimulated electron emission (1), of photostimulated F-luminescence bands (2) and of phosphorescence (3) in a KCl-Tl single crystal. (4) Absorption spectrum and (4') excited absorption spectrum of the same phosphor after exposure to Al-emission



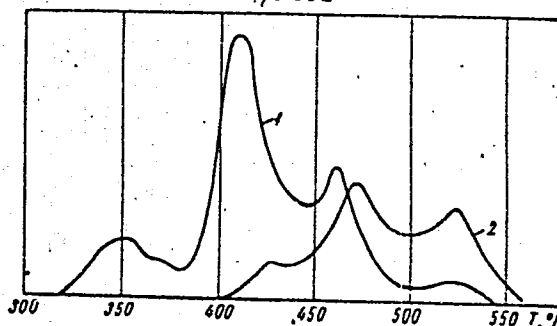
Card 3/4

20839

S/048/61/025/003/028/047  
B104/B202

Photo- and thermostimulated electron...

Legend to Fig. 2: thermal  
decoloration (1) and thermo-  
stimulated electron emission  
(2) of an NaCl-Tl single crystal  
excited by Al-emission.



Card 4/4

S/613/62/000/018/012/013  
E039/E120

AUTHOR: Kyaembre, Kh. F.

TITLE: Electron emission from excited RbCl-Tl

SOURCE: Akademiya nauk Estonskoy SSR. Institut fiziki i astronomii. Trudy. no.18. 1962. Issledovaniya po lyuminestsentsii. 145-148

TEXT: Post electron emission is difficult to investigate because it is normally very weak; however, in the case of RbCl-Tl (0.05 mole % Tl) it is sufficiently strong for an investigation to be undertaken. Using a double focussing monochromator for excitation and a Geiger counter for measuring the electron emission, a spectrum of the post electron emission is obtained. It is shown that this spectrum coincides with absorption band for RbCl-Tl within the limits of experimental error and corresponds to the  $^1S_0 \rightarrow ^1P_1$  and  $^1S_0 \rightarrow ^3P_2$  electron transitions in the  $Tl^+$  centres. Post electron emission is not excited in the 248 mμ

Card 1/2

Electron emission from excited ...

S/613/62/000/018/012/013  
E039/E120

region of the absorption band ( $^1S_0 \rightarrow ^3P_1$  transition).

Unactivated RbCl and TlCl itself do not exhibit post electron emission, showing that the electron emission is caused by the  $Tl^+$  centres in RbCl. The post electron emission spectra are similar in character to phosphorescence spectra in the alkali halides, suggesting that similar physical processes occur in both effects. The spectrum of photo-stimulated emission from RbCl-Tl is also measured and shown to be similar in character to the photo-stimulated emission spectra of other phosphors investigated by the author.

There is 1 figure.

SUBMITTED: December 30, 1961

Card 2/2



ACCESSION NR: AT3013086

S/2613/62/000/0021/0139/0172

AUTHORS: Tiysler, E. S.; Kyaembre, Kh. F.

TITLE: On the connection between photoconductivity and recombination luminescence in alkali halide crystal phosphors

SOURCE: AN EstSSR. Institut fiziki i astronomii. Trudy\*, no. 21, 1962, 139-172

TOPIC TAGS: activator, photoconductivity, crystal, phosphor, excitation, photoelectric, photometer, luminescence

ABSTRACT: The activator internal photoconductivity in the KBr-In crystal phosphor has been investigated. An attempt has been made to obtain new experimental values for processes accompanying delocalized activator excitation and to acquire photoelectric confirmation of long wave-length radiation recombination in these crystals. Excitation spectra for various pure (KBr, KCl, KI) and activated alkali-halide crystals were obtained in the region 200-320 m $\mu$  on the SF-4 spectrometer. The excitation spectra of activated crystal photoconductivity show a minimum in the region of the activator center absorption band. The pure crystals were prepared by the Kiropoulos method and the activated crystals by the Stokebarger-Shamovskiy

Card 1/82

ACCESSION NR: AT3013086

method. Luminescence measurements were obtained on the photometer FEU-19. A hydrogen lamp served as the source of excitation through a monochromator EMR-3. Photocurrents were measured through a micro-x-ray device called "Kaktus" with microvoltmeter N-373, amplifier F-16 and potentiometer PSI-01. In KBr-In crystals the photoconductivity excitation spectra in coarse features coincides with the absorption band corresponding to the electronic transition  $^1S_0 \rightarrow ^1P_1$  in  $In^+$  -centers. Also measured were spectra of F-center creation in KBr-In crystals. The quantum yield spectra of KBr-In phosphorescence obtained for  $h\nu \leq 5.5$  eV show a good correlation with those of I. V. Yaek (Opt. i spektr., 8, 577, 1960). The excitation spectra, as well as the spectra of the relative quantum yield of photoconductivity, show characteristics analogous to phosphorescence. The conclusion has been drawn that the existence of the internal photoelectric effect accompanying the excitation of prolonged afterglow can be considered as a final evidence of the recombinational mechanism of the latter. "The authors are grateful to Ch. B. Lushchik for his help and advice." Orig. art. has: 27 formulas and 7 figures.

ASSOCIATION: AN EstSSR. Institut fiziki i astronomi (AN EstSSR. Institute of Physics and Astronomy)

SUBMITTED: 16Jun62

DATE ACQ: 11Sep63

ENCL: 00

Card 2/2

L 19721-63

EWI(1)/BDS AFFTC/ASD/IJP(C)/SSD

ACCESSION NR: AT3002217

8/2942/63/001/000/0183/0185

AUTHOR: Tlyslar, E.; Kyaembre, Kh. ~~12~~ 8TITLE: Internal photoeffect at luminescence centers in KBr-In

SOURCE: Optika i spektroskopiya; sbornik statey. v. 1: Lyuminesentsiya. Moscow, Izd-vo AN SSSR, 1963, 183-185

TOPIC TAGS: phosphorescent, crystal, photoconductance, F-band, photoemission, quanta

ABSTRACT: An investigation has been made of the photoemission properties of the phosphorescent crystal KBr-In. A monocrystalline KBr-In specimen (0.001 mol.% In) was excited by a series of short pulses of monochromatic ultraviolet radiation. The resulting excitation photoconductance spectrum is shown in Fig. 1 (see enclosure), together with the spectra for the quantum yield of photoconductance, stimulated photoelectric conductance, KBr-In absorption, and F-band x-ray excitation absorption. For the photoconductance quantum yield in ionic crystals the author concludes that, in addition to its dependence on the excitation light frequency, the yield depends on the photoelectric effect of the KBr-In activators. "The author is deeply indebted to Ch. B. Lushchik for his guidance in the work." Orig. art. has: 4 formulas and 1 figure.

Card 1/8,

ACCESSION NR: AT4016323

S/0000/62/000/000/0390/0395

AUTHOR: Kyaembre, Kh. F.

TITLE: Photostimulated electron emission by alkali halide crystals

SOURCE: Vses. soveshch. po fiz. shchelochnogaloidn. kristallov. 2d, Riga, 1961. Trudy\*. Fiz. shchelochnogaloidn. kristallov (Physics of alkali halide crystals). Riga, 1962, 390-395

TOPIC TAGS: alkali halide, alkali halide crystal, electron, electron emission, photostimulated emission, photoexcitation, ultraviolet excitation, electron luminescence, electron hole, electron hole recombination, phosphorescence

ABSTRACT: Photoexcitation by monochromatic ultraviolet light, stimulation by an incandescent lamp with and without a monochromator and a Geiger counter were all used in the study of the excitational processes which are involved in photostimulated electron emission from KBr, CsBr, CsI, and  $\text{NH}_4\text{Br}$ . The photostimulated electron emission excitation spectra for KBr and CsBr were found to resemble the first excitational absorption lines, while in CsI the excitation of photostimulated electron emission was observed over the whole range of observable excitation spectra lines. To investigate the mechanism of photostimulated electron emission and identify the type of color centers

Card 1/2

ACCESSION NR: AT4016323

responsible for it, the photostimulated electron emission spectrum in KBr was measured. It was shown that the spectrum does not coincide with the F-absorption band and rises monotonously toward the short wave side. The photostimulated electron emission excitation spectra for KCl - Tl, KCl - In and NaCl - Tl were also measured and found to resemble those for phosphorescence and luminescence. This is thought to indicate that electron luminescence rather than hole recombination luminescence exists in these systems. It is concluded that photostimulated electron emission in these cases is associated with F-centers. "The author thanks Ch. B. Lushchik for guidance and E. Tysler for technical assistance." Orig. art. has: 3 figures.

ASSOCIATION: Institut fiziki i astronomii AN Estonskoy SSR (Institute of Physics and Astronomy, Academy of Sciences of the Estonian SSR)

SUBMITTED: 00

DATE ACQ: 06Mar64

ENCL: 00

SUB CODE: *NP, IC*

NO REF SOV: 008

OTHER: 013

Card

2/2

L 49275-65 EWT(1)/EWT(m)/T/EWP(t)/EEG(b)-2/EWP(b) Pi-4 IJP(c) JD/JG/GG

ACCESSION NR: AP5009525

8/0048/85/029/003/0466/0458

AUTHOR: Belkind, A.I.; Kyaembre, Kh. P.

30  
133  
B

TITLE: Concerning two mechanisms of photostimulated electron emission from ionic crystals /Report, 12th Conference on Luminescence held in L'vov, 30 Jan-5 Feb 1964

SOURCE: AN SSSR. Izvestiya. Seriya fizicheskaya, v. 29, no. 3, 1965, 466-468

TOPIC TAGS: photoelectric emission, color center, alkali halide, single crystal

ABSTRACT: The authors recall their earlier experimental work on photostimulated electron emission from colored alkali halide crystals (Tr. in-ta fiz. i astron. AN EstSSR, No.14, 247 (1961); No. 21, 173, (1962); Sb. Fizika shchelochnogaloidnykh kristallov, p. 390, Riga, 1962; Radiatsionnaya fizika tvrdogo tela, p.51, Riga, 1964; Tr. In-ta fiz, i astron. AN EstSSR, No.21, 287, (1962)), and briefly discuss some of the results in terms of the following two mechanisms: 1) Photoionization emission - an F center is directly ionized by the incident photon with the emission of an energetic electron, and 2) Photothermal emission - an F center is excited by the incident photon to the  $2_p$  level, is subsequently thermally ionized, and the resulting electron is thermally ejected from the crystal. These mechanisms lead to

Card 1/2

1 1975-65

ACCESSION NR: AP500952

3

different types of stimulation spectrum, both of which have been observed. Which mechanism predominates in a given case depends on many factors, including the diffusion length of a thermal electron, the distance an energetic electron can travel in the crystal before losing its energy, the thickness of the colored layer, and the electron affinity in the crystal. The authors are very grateful to Ch. B. Lushchik for discussing the results." Orig. art. has: 2 figures.

ASSOCIATION: Institut fiziki Akademii nauk SSSR (Institute of Physics, Academy of Sciences, SSSR); Institut fiziki i astronomii AN EstSSR (Institute of Physics and Astronomy, AN EstSSR)

SUBMITTED: 00

ENCL: 00

SUB CODE: OP, SE

NR REF SOV: 004

OTHER: 013

*me*  
Card 2/2

ACC NR: AP7004969

SOURCE CODE: UR/0048/66/030/009/1448/1450

AUTHOR: Bolkind, A.I.; Bichevin, V.V.; Kalendarev, R.I.; Kyaembre, Kh.F.

ORG: Physics Institute of the LatvSSR Academy of Sciences (Institut fiziki Akademii nauk LatvSSR); Institute of Physics and Astronomy of the EstSSR Academy of Sciences (Institut fiziki i astronomii Akademii nauk EstSSR)

TITLE: Further remarks concerning two mechanisms of photostimulated electron emission from ionic crystals /Report, Fourteenth All-Union Conference on Luminescence (Crystal Phosphors) held at Riga, 16-23 Sept. 1965/

SOURCE: AN SSSR. Izvestiya. Seriya fizicheskaya, v. 30, no. 9, 1966, 1448-1450

TOPIC TAGS: luminescent crystal, alkali halide, secondary electron emission, photoelectric effect, luminescence center, F band, *STIMULATED EMISSION, PHOTOELECTRON*

ABSTRACT: The following two mechanisms for photostimulated electron emission from alkali halide crystals are briefly discussed: 1) direct photoionization of an F center with the escape from the crystal of the resulting energetic photoelectron) and 2) photothermal ionization of a center and escape from the crystal as a result of thermal fluctuations of the thermal electron thus produced. The potential barriers against escape of an electron from alkali halide crystals are calculated as the difference between the photoelectric threshold and the width of the forbidden gap from relevant data in the literature. Values of W for NaCl and KCl were also calcu-

Card 1/2



ACC NR: AP7004969

lated from the temperature dependence of electron emission from previously x-ray irradiated crystals stimulated in the F and E bands by invoking mechanism 2). The W values found in this way were systematically lower than those calculated directly from the photoelectric threshold. It is hypothesized that this difference is due to the fact that the photoelectric effect was investigated in vacuum, whereas the emission due to stimulation in the F and E bands was measured in a gaseous atmosphere. This hypothesis was tested by measuring the photostimulated luminescence and electron emission in vacuum of x-ray or  $\gamma$ -ray excited KCl:Tl and KBr:Tl crystals. It was found that a maximum in the F band in the stimulation spectrum for photostimulated electron emission, which is characteristic of process 2), was present only when the measurements were made in a gaseous atmosphere (air + alcohol vapor, or methane). It is assumed that the presence of an atmosphere results in contamination of the surface and therefore in a lower value of W, which makes it possible for mechanism 2) to contribute appreciably to the electron emission. Orig. art. has: 3 figures and 1 table.

SUB CODE: 20      SUBM DATE: none      ORIG. REF: 007      OTH REF: 008

Card 2/2

ACC NR: AP7004970

SOURCE CODE: UR/0048/66/030/009/1451/1453

AUTHOR: Kyaembre, Kh.F.; Okk, M.F.; Yaek, I.V.

ORG: Institute of Physics and Astronomy of the EstSSR Academy of Sciences (Institut fiziki i astronomii Akademii nauk EstSSR)

TITLE: Optical and thermal electrons and photostimulated luminescence in KCl:Tl  
/Report, Fourteenth All-Union Conference on Luminescence (Crystal Phosphors) held at Riga, 16-23 Sept. 1965/

SOURCE: AN SSSR. Izvestiya. Seriya fizicheskaya, v. 30, no. 9, 1966, 1451-1453

TOPIC TAGS: luminescent crystal, potassium chloride, thallium, luminescence spectrum, recombination luminescence, temperature dependence, electron energy

ABSTRACT: The authors have extended the investigations of two of them (M.F.Okk and I.V.Yaek, Izv. AN SSSR, Ser. Fiz., 29, 46 (1965)) on photostimulated luminescence in ionic crystals to include stimulation by radiation on the short wavelength side of the F band. The luminescence excitation spectra of x-ray excited KCl:Tl crystals were recorded at 300 and 100° K for stimulating photon energies from 1.6 to 4 eV. Four peaks were observed in the spectra: the F-band peak at 2.2 eV, the K-band peak at 2.75 eV, the Tl<sup>0</sup>-band peak at 3.3 eV, and a peak of unknown origin at 3.8 eV. The temperature dependence of the luminescence intensity for stimulation in the F, K, and Tl<sup>0</sup> bands were separately recorded for the temperature range from 80 to 300° K. The

Card 1/2

ACC NR: AP7004970

intensity of the F flash decreased monotonically with decreasing temperature; that of the K flash was almost temperature independent; and the intensity of the  $Tl^{\circ}$  flash increased somewhat with decreasing temperature. The temperature independence of the K-flash intensity is in good accord with the findings of H. Kanzaki, T. Ninomiya, and K. Kido (J. Phys. Chem. Sol., 22, 309 (1961)) on photostimulated conductivity. It is concluded from the present results and different findings of other authors that the K flash is recombination luminescence in which true optical (hot) electrons, rather than thermal electrons, participate. The reason for the increase of the  $Tl^{\circ}$ -flash intensity with decreasing temperature is not known. The authors thank Ch. B. Lushchik for suggesting the topic and discussing the results. Orig. art. has: 2 formulas and 2 figures.

SUB CODE: 20 / SUBM DATE: none / ORIG. REF: 002 / OTH REF: 009

Card 2/2

MOGILEVSKIY, Ye. I.; ZEVAKINA, R. A.; LAVROVA, Ye. V.; KYAKHOVA, L. N.

"On the Nature and Space - and Time - Distribution of Ionospheric Disturbances."

summary to be presented at the 13th Gen Assembly, IUGG, Berkeley, Calif, 19-31  
Aug 63.

BELYY, V.D., RAKANT, I. I., KYAKHOVITSKIY, S.I.

Coal Mines and Mining

Discussion of B. N. Liubimov's article on mine parachutes. Ugol' 27 no. 5  
(314) (1952)

9. Monthly List of Russian Accessions, Library of Congress, August 1952 ~~1953~~, Uncl.

KYAKHOVSKIY, D. M.

"Aerodynamics of Jet and Flame Processes, Trudy TSKTI, 12, 1949, pp. 82-103

KYAKK, Val'ter Aleksandrovich; GIRSHKAN, I.A., red.

[Distribution filling system for navigation locks;  
comparative indices according to conditions with the  
vessel standing in the locks] Raspreditel'nye  
sistemy pitaniia sudokhodnykh shliuzov; sravnitel'-  
nye pokazateli po usloviyam otstoia shliuzuiushchikh-  
sia sudov. Moskva, Gosenergoizdat, 1963. 50 p.  
(MIRA 17:3)

GIRSHKAN, I.A., *otv. red.*; ARABADZHIAN, I.R., *red.*; GORELIK, L.V.,  
*red.*; YERYKHOV, B.P., *red.*; KYAKK, V.A., *red.*; PECHENKIN,  
M.V., *red.*; PAVLOVSKAYA, L.N., *red.*; SUDAKOV, V.B., *red.*;  
SHUL'MAN, S.G., *red.*

[Collection of reports on hydraulic engineering] Sbornik  
dokladov po gidrotekhnike. Moskva, Gosenergoizdat, 1961.  
243 p.  
(MIRA 17:7)

1. Nauchno-tekhnicheskaya konferentsiya molodykh nauchnykh  
rabotnikov, 2d, 1961.



KYAKK, V.A., inzh.

Coefficient of resistance of a flat gate valve in the water-conducting gallery of a lock in the case of a triangular baffle in front of the gate. Izv.VNIIG 63:239-242 '60. (MIRA 14:5)  
(Locks)

KOMSHILOV, N.F.; KISHCHENKO, T.I.; KYALINA, L.V.

Freshly cut pine stumps as a prospective pulpwood material. Bus.prom.  
[38] no.7:11-12 J1 '63. (MIRA 16:8)

1. Institut lesa Karel'skogo filiala AN SSSR.  
(Woodpulp)

ACC NR: AP6023678 (A,N) SOURCE CODE: UR/0143/66/000/004/0107/0110

AUTHOR: Kyalyan, P. A. (Engineer)

ORG: Moscow Aviation Institute <sup>im. Ordzhonikidze</sup> (Moskovskiy aviatsionnyy institut)

TITLE: Losses and efficiency of a contactless a-c machine operating at varying speed

SOURCE: IVUZ. Energetika, no. 4, 1966, 107-110

TOPIC TAGS: electric machine, ac machine, contactless electric machine

ABSTRACT: It has been known that the excitation active power in a contactless doubly-fed a-c machine operating at varying speed is taken from or returned to the supply system; this power is never wasted in the machine. By using differential equations to describe the machine operation and by using practical numerical values of the rotor time constant, coupling coefficient, and leakage factor, these

Card 1/2

UDC: 621.313.3.017

ACC NR: AP6023678

conclusions are reached: (1) The stator and rotor current and losses are independent of rotor speed; they are determined by design parameters and stator load only; within a wide range of rpm, the excitation-current modulus is practically constant; (2) The efficiency of an idealized machine is independent of rotor-rpm variations; the efficiency is equal to that of an identical constant-speed machine. Orig. art. has: 1 figure and 15 formulas.

SUB CODE: 09 / SUBM DATE: 15Jul65 / ORIG REF: 005

Card 2/2

7221-66 EWT(1)

ACC NR: AP6012433

SOURCE CODE: UR/0143/65/000/011/0007/0014

AUTHOR: Kyalyan, P. A. (Engineer)

36

B

ORG: Armenian Scientific Research Institute of Power Engineering (Armyanskiy nauchno-issledovatel'skiy institut energetiki)

TITLE: Power relations in a contactless a-c machine operating at variable speed

SOURCE: IVUZ. Energetika, no. 11, 1965, 7-14 29

TOPIC TAGS: ac machine, electric generator, auxiliary aircraft equipment

ABSTRACT: A synchronous-flux machine for generating constant-frequency 3-phase power at variable speed of rotation is analyzed; it includes a special frequency changer for supplying the field-current frequency proportional to the rotor slip. The magnetic flux produced by the field current rotates with respect to the open stator winding at a synchronous speed; a stationary frequency changer

Card 1/2

UDC: 621.313.312.017

L 37221-66

ACC NR: AP6012433

supplies the field winding (cf. B. V. Noord, *Applic. and Ind.*, no. 45, 1959). This machine is theoretically regarded as a cascade of two symmetrical wound-rotor induction machines; its fundamental equations are set up, and formulas for currents, power, and torque under sustained operating conditions are derived. Distribution of the active power depending on the rotor-rpm variation, for  $s > 0$ ,  $s = 0$ ,  $s < 0$ , is analyzed. It is found that the excitation power is not lost in the machine, but rather is supplied to the line or is taken from the line. It is claimed that the above type of synchronous-flux machine can operate economically as a generator or as a motor. Orig. art. has: 2 figures, 31 formulas, and 1 table.

SUB CODE: 01, 09 / SUBM DATE: 15Jul65 / ORIG REF: 004 / OTH REF: 002

*ne*  
Card 2/2

L 4458-66

ACC NR: AP6022902

SOURCE CODE: UR/0173/66/019/001/0016/0023

AUTHOR: Kyalyan, P. A.

ORG: Armenian NII of Power Engineering (Armyanskiy NII energetiki)

30  
B

TITLE: Determining the optimum boundaries for the rotary speed change range of a noncontact double power feed machine

SOURCE: AN ArmSSR. Izvestiya. Seriya tekhnicheskikh nauk, v. 19, no. 1, 1966, 16-23

TOPIC TAGS: electric equipment, electric power engineering, electric rotating equipment

ABSTRACT: The optimum bounds of the rotary speed range of a noncontact ac double power feed machine were investigated. With slippage of the rotor the magnetic flux created by the excitation current rotates in respect to the interrupted stator winding with a synchronous speed. The excitation winding is fed from a special reversible static frequency converter, and the machine operates by regulation of the excitation voltage either in a synchronous or a nonsynchronous mode. In a synchronous mode the excitation voltage frequency is the independent variable, and the machine has all the properties of a synchronous machine. In the nonsynchronous mode the excitation voltage frequency is the dependent variable, automatically changing as a function of the rotor rotational speed. The slippage determines the

Card 1/2

L 44458-66

ACC NR: AP6022902

operating stability, and the machine is similar to a nonsynchronized synchronous machine. The rotation speed change range is related to the minimum and maximum rotor slippage. Analytic expressions are developed relating these factors to the ratio of the pole number of the exciter to the main machine, the rotation speed of the main machine, the angular velocity of the rotor rotation, and the power quantities of the machine. The power of the excitation system is the sum of the rotor exciter power and the frequency converter power. These powers were analyzed for both the beginning and end of the speed change range. The noncontact double feed machine has all the properties of a double feed machine, differing from it by the presence of the exciter. A comparison of the two machines showed that the difference of the excitation system power of the two equals the exciter power. Values of the quantities discussed are quoted for an actual machine. Orig. art. has: 4 figures and 31 equations.

SUB CODE: 09/

SUBM DATE: 14Sep65/

ORIG REF: 002/

OTH REF: 001

Card 2/2 *20*



KYALYAN, P. A., inzh.

Energy relationships in a brushless a.c. machine operating  
at a varying angular velocity. Izv. vys. ucheb. zav.; energ.  
8 no.11:7-14 N '65. (MIRA 18:11)

1. Armyanskiy nauchno-issledovatel'skiy institut energetiki.

KYAMALOV, I.

Category: USSR / Farm Animal Diseases Caused by Bacteria and Fungi

V-2

Abs Jour: Refer. Zhur-Biologiya, No 16, 1957, 72288

Author : Ganiev, Akhmedov, Kyamalov, Vanesyan

Inst : Not given

Title : Diplococcic Infection in Calves.

Orig Pub: Sots. S-KH. Azerbaidzhana, 1956, No 11, 34-37 - ~~14~~

Abstract: Diplococcic infection was observed on a farm, where 58.1 percent of calves were diseased, and 16.5 percent died. The calves became sick at the age of 1 day to 3 months. The course of disease was acute, subacute, and chronic in form. In the acute form the body temperature rose, there was a loss in appetite, tearing, and a depressed state. In the subacute - there was a rise in temperature, cough, diarrhea, swelling of the joints, and lameness. The duration of the disease - 10-12 days. In the chronic form a cough was noted, delayed growth and exhaustion of the animals. The disease lasted at times longer than one month. The infection occurred in utero, aerogenously, and particularly through the digestive tract. The spreading

Card : 1/2

-8-

• Category: USSR / Farm Animal Diseases Caused by Bacteria and Fungi. V-2

Abs Jour: Refer. Zhur-Biologiya, No 16, 1957, 72288

of the disease was increased by high relative humidity, increase in ammonia and carbon dioxide in the barn. From the preparations used for the treatment of calves the best results (92.8 percent of cure) gave ekmonovocillin-1, given intramuscularly in a dose of 5,000 international units per kg every 20-24 hours (cure in 3-6 injections).

Card : 2/2

-9-

AKHMEDOV, A., dotsent; KYAMALOV, I., veterinarnyy vrach; VANESYAN, I.,  
veterinarnyy fel'dsher.

Treating diplococcal diseases in calves. Veterinariia 33 no.12:  
27-28 D '56. (MLRA 9:12)

1. Azerbaydzhanskiy sel'skokhozyaystvennyy institut  
(for Akhmedov).  
(Calves--Diseases) (Diplococcus)

KYAMESHIS, P.P. [Kemesis, P.]

Equations describing the dynamics of a ferrodynamic automatic recording compensator. Trudy AN Lit. SSR Ser. B no.4:181-187 '62. (MIRA 18:3)

1. Institut energetiki i elektrotehniki AN Litovskoy SSR.

GASANOV, Sh.M., prof. zasluzhenny deyatel' nauki; IMANOV, S.Kh.;  
GUSEYNOVA, L.R.; KYAMIL', E.M.; MELIK-ABBASOVA, F.A.; MIRZOYEV, G.

Effectiveness of treating hypertension at the Mardakyar  
Specialized Neurosomatic Sanatorium. Sbor. trud. Azerb.  
nauch.-issl. inst. kur. i fiz. metod. lech. no.9:42-48 '63.  
(MIRA 18:8)

GASANOV, Sh.M., naal. deyatel' nauki, prof.; KREYNINA, L.B.; KYAMIL', E.M.

Effect of the climate of the Chukhuryurd Health Resort zone  
on vegetative and functional changes in children and adolescents.  
Sbor. trud. Azerb. nauch.-issl. inst. kur. i fiz. metod. lech.  
no.95112-117 '63. (MJRA 18:8)

GUSEYNOV, A.G., kand.med.nauk; KYAMIL', E.M., nauchnyy sotrudnik.

Joint scientific session of the institutes of health resort treatment and physiotherapy of the Azerbaijan, Armenian, and Georgian Soviet Socialist Republics. Vop.kur., fizioter. i lech. fiz. kul't. 27 no.4:378-381 JI'Ag'62 (MIRA 16:11)

1. Direktor Azerbaydzhanskogo instituta kurortologii i fizicheskikh metodov lecheniya imeni S.M.Kirova (for Guseynov).
2. Nauchnyy sotrudnik Azerbaydzhanskogo instituta kurortologii i fizicheskikh metodov lecheniya imeni S.M.Kirova (for Kyamil').

\*



KYAMILEV, EB

EPT.  
.R93093

HAZYI KHUKMET-PEVETS SVOBODY I MIRA. MOSKVA, IZD-VO ZNANIYE, 1952. 22 P.  
PORT. (VSESOUZNOYE OBSHCHESTVO PO RASPROSTRANENIYU POLITICHESKIKH I NAUCHNYKH  
ZNANIY) BIBLIOGRAPHICAL FOOTNOTES.

KYAMYARYA, N.

The turning point. Izobr.i rats. no.1:32-33 Ja '60.  
(MIRA 13:4)

1. Nachal'nik tekhnicheskogo byuro pressovosvarochnogo tsekha  
Onezhskogo traktornogo zavoda, chlen tsakhovogo soveta  
Vsesoyuznogo obshchestva izobratateley i ratsionalizatorov,  
g.Petrozavodsk.  
(Petrozavodsk--Technological innovations)

KYANDARYAN, K.A.

Axometric investigation of a heart located on the right side  
in a case of visceral inversion. Izv. AN Arm. SSR. Biol. i sel'khoz.  
nauki. 4 no.12:1101-1115 '51. (MLRA 9:8)

1. Institut rentgenologii i onkologii.  
(HEART--ABNORMALITIES AND DEFORMITIES)

KYANDARYAN, K.A.

Abnormal location of the azygos vein (on the normal state and pathology of the accessory lobe of the azygos veins in the roentgenogram). Vest.rent.i rad. no.5:21-24 S-0 '53. (MLRA 7:1)

1. Iz Yerevanskogo nauchno-issledovatel'skogo instituta rentgenologii i onkologii (direktor - zasluzhennyy deyatel' nauki professor V.A.Fanardshyan). (Veins) (Lungs) (X rays)

KYANDARYAN, K.A.; MANUSADZHYAN, G.S.

Large frame individual picture fluorography of chest organs. Izv.  
AN Arm.SSR.Biol.i sel'khoz.nauki 6 no.10:59-64 '53. (MLRA 9:8)

1. Kafedra rentgenologii Yerevanskogo meditsinskogo instituta i  
Institut rentgenologii i onkologii Ministerstva zdravookhraneniya  
Armyanskoy SSR.

(CHEST--RADIOGRAPHY)

KYANDARYAN, K.A.: MANUSADZHIAN, G.S.

New method for X-ray examination of the heart (Kymofluorography).  
Dokl. AN Arm. SSR 17 no.3:73-74 '53. (MLRA 8:2)

1. Chlen-korrespondent Akademii nauk Arm. SSR (for Fanardzhyan).
2. Kafedra rentgenologii Yerevanskogo meditsinskogo instituta i Institut rentgenologii i onkologii Minzdrava Armyanskoy SSR.  
Predstavleno V.A. Fanardzhanom.  
(Diagnosis, Fluoroscopic) (Heart--Examination)

KYANDARYAN, K.A.

PANARDZHIAN, V.A., professor; KYANDARYAN, K.A., kandida' meditsinskikh nauk; POPOYAN, S.A., kandidat meditsinskikh nauk; ABOV'YAN, M.N., nauchnyy sotrudnik

Modifications of cardiac function in gamma-irradiation of the brain; roentgenokymographic and electrocardiographic studies. Vest. rent. i rad. no.4:55-57 J1-Ag '54. (MLRA 7:10)

(BRAIN, effect of radiation, on gamma rays, ECG & kymographic changes of heart during irradiation)

(HEART, physiology, eff. of gamma-irradiation of brain, ECG & kymography)

(RADIATIONS, effects, gamma, on brain, ECG & kymographic changes of heart during irradiation)

KYANDRYAN, K.A., kandidat meditsinskikh nauk; MANUSADZHYAN, G.S.

Significance of large-frame fluorography in diagnosis of pulmonary diseases. Probl. tub. no.5:22-24 S-O '54. (MLRA 7:12)

1. Iz kafedry rentgenologii (zav. prof. V.A.Fanardzhyan) Yerevan-  
skogo meditsinskogo instituta (dir. dotsent G.A.Savondyan) i  
Instituta rentgenologii i onkologii (dir. prof. V.A.Fanardzhyan)  
(LUNGS, radiography  
x-ray large frame fluorography, diag. value)



RYANDARYAN, K. A., DEMINCHOGHYAN, I. G., SHURURYAN, S. G., FAHAREZHAYAN, D. A., Prof.  
and PAPOYAN, S. A.

"Changes in the Blood and Blood-Forming Organs, and Some Biochemical Indices in the Experimental Duplication of Radiation Sickness." a report presented at the Transcaucasian Radiological Conference, Tbilisi, 28-31 Oct 55.

Sum. No. 1047, 31 Aug 56

KYANDARYAN, K. A., PAPOYAN, S. A. and CHKAREULI, Y.e I.

"Dynamics of the Inclusion of Radiomethionine Into the Proteins of Organs and Tissues of Rats Irradiated With Different Doses of X Rays." a report presented at the Transcaucasian Radiological Conference, Tbilisi, 28-31 Oct 55.

Sum. No. 1047, 31 Aug 56

KYANDARYAN, K. A., PAPOYAN, S. A. and BEGLARYAN, A. G.

"Hystomorphology of the Nervous System in Acute Experimental Radiation Sickness."  
a report presented at the Transcaucasian Radiological Conference, Tbilisi, 28-31  
Oct 55.

Sum. No. 1047, 31 Aug56

KYANDARYAN, K.A., kandidat meditsinskikh nauk (Yerevan)

Dextroposition of the aortic arch. Klin.med.33 no.6:75-79 Je '55.  
(MLRA 8:12)

1. Iz kafedry rentgenologii (zav.-prof. V.A.Fanardshyan)  
Yerevanskogo Meditsinskogo instituta.

(AORTA, abnormalities,

dextroposition of aortic arch, clin.aspects & diag.)

(ABNORMALITIES,

same)

(CARDIOVASCULAR DEFECTS, CONGENITAL

same)

USSR/Human and Animal Physiology - Effects of Physical  
Factors. Ionizing Radiation.

E-11

Abs Jour : Ref Zhur - Biol., No 13, 1956, 34686

Author : Chkareuli, Ye.I., Kyandaryan, K.A., Papoyan, S.A.

Inst : -

Title : The Dynamics of Radioactive Methionine Incorporation into  
Organ and Tissue Proteins of Rats Irradiated with Various  
X-ray Dosages.

Orig Pub : Tr. 1-y zakavkazsk. konferentsii po med. radiol. Tbilisi,  
Gruzmedgiz, 1956, 104-110

Abstract : Rats were subjected to irradiation of 200-800 r magnitude.  
An hour later they received subcutaneous injections of me-  
thionine (I) marked S35. One to 24 hours after administra-  
tion its contents were determined in damp tissues and dry  
proteins. On the 1st, 3rd, 5th, and 6th days after irradi-  
ation I injections were given again and I activity determi-  
ned.

Card 1/3

77

USSR/Human and Animal Physiology - Effects of Physical  
Factors. Ionizing Radiation.

T-11

Abs Jour : Ref Zhur - Biol., No 10, 1950, 04606

In all cases the degree of incorporation was expressed by relative activity (RA), i.e., by percentage relationship of I activity in 1 gr of tissue to administered dose activity per 1 gr of the animal's weight. For kidneys, this figure exceeded control indicators after 3 and 6 hours. It fell below controls on the 24th hour after application. On the 3rd and 5th days, kidney RA in irradiated animals was lower than control figures. During the first 6 hours of the 3rd and 5th days, a general tendency to decreased I incorporation into its proteins was observed in the liver (up to 3.3 percent as compared to 3.8 percent in controls at a 600 r dose), which was reversed into a tendency to increased I incorporation on the 24th hour (an increase by almost 2 times at a 600 r dose). Incorporation proceeded slower than in controls on the 5th and 6th days after

Card 2/3

Country : USSR  
Category: Human and Animal Physiology. Action of Physical Factors. Ionizing Radiation. T  
Abs Jour: RZhBiol., No 19, 1958, 69303  
Author : Zogadskaya, A.A.; Arutyunyan, R.K.; Kyandaryan, K.A.  
Inst :  
Title : The General Reaction of the Organism and Electroencephalographic Changes Following Irradiation of the Brain with Radioactive Cobalt.  
Orig Pub: V sb.; Tr. 1-i Zakavkazsk. koferentsii po med. radiol. Tbilisi, Gruzmedgiz, 1956, 132-137.  
Abstract: Radiation sickness was produced in rabbits by insertion of applicators with Co<sup>60</sup> in the skin of  
Card : 1/4

Country : USSR

Category: Human and Animal Physiology. Action of Physical Factors. Ionizing Radiation.

T

Abs Jour: RZhBiol., No 19, 1958, 89383

the fronto-temporal area (the dose of irradiation about 51,000 r). During the first hours following irradiation the amplitude of the oscillations of the bio-potentials of the brain decreased and slower waves of duration of 0.30-0.35 sec. appeared. The potentials became more frequent from the 3rd to the 7th day following irradiation. With the beginning of the second week a tendency to normalization of the EEG was observed as far as the re-establishment of the amplitude and reactivity was concerned, regardless of the manifestation of the general weakness associated with a markedly elevated excitability.

Card : 2/4

T-148



Country : USSR  
Category: Human and Animal Physiology. Action of Physical  
Factors. Ionizing Radiation.

T

Abs Jour: RZhBiol., No 19, 1958, 89383

The animals perished on the 7-13th day following irradiation. Men, suffering from neoplasms of the skin of the upper part of the face and of the scalp were submitted to irradiation with  $\text{Co}^{60}$  (therapeutic doses of 4-7,000  $\text{r}$  per course, by the distance-application method). Patients with marked local skin reactions remained employable and practically normal during and after the period of irradiation. During the first days following irradiation,  $\Delta$ -waves appeared in the EEG of the patients, of 0.4-0.8 seconds duration, the amplitude of the biopotentials decreased as

Card : 3/4

Country : USSR

Category: Human and Animal Physiology. Action of Physical  
Factors. Ionizing Radiation.

T

Abs Jour: RZhDiol., No 19, 1958, 89383

well as the reactivity of the cerebral cortex.  
The EEG returned to normal within 10 or more days  
following irradiation. -- V.A. Shaternikov

Card : 4/4

T-149

FANARDZHIAN, V.A., prof.; KYANDARYAN, K.A., kand.med.nauk; STAMBOLTSYAN, R.P.,  
kand.med.nauk

Heart changes in silicosis. Vop.kardiol. no.1:20-36 '56.  
(MIRA 12:9)

1. Chlen-korrespondent AN Armyanskoy SSR (for Fanardzhyan).  
Iz Gospital'noy terapevticheskoy kliniki Yerevanskogo meditsin-  
skogo instituta i Instituta rentgenologii i onkologii.  
(HEART--DISEASES) (LUNGS--DUST DISEASES)

*KYANDARYAN, K. A.*

FANARDZHIAN, V.A., professor; KYANDARYAN, K.A., kandidat meditsinskikh nauk.

On professor V.A. D'iachenko's book "Roentgen diagnosis of the diseases of internal organs." Izv. AN Arm. SSR, Biol. i sel'khoz. nauki 10 no.6:109-112 Je '57. (MLRA 10:8)

1. Akademik Akademii nauk Armyanskoy SSR (for Fanardzhyan).  
(RADIOLOGY, MEDICAL)

KYANDARYAN, K. A.

AUTHOR: KJANDARJAN, K. A., PAPOJAN, S. A., BEGLARJAN, A. G., PA - 2099  
ZAGAZAJA, A. A., ARUTJUNJAN, R. K.  
TITLE: The Functional and Morphological Modifications of the Cerebrum  
by the Action of Ionizing Rays. (Russian)  
PERIODICAL: Doklady Akademii Nauk SSSR, 1957, Vol 112, Nr 2, pp 249-252  
(U.S.S.R.)  
Received: 3 / 1957 Reviewed: 4 / 1957

ABSTRACT: The present work deals with the results of parallel and experimental investigations of the functional and morphological modifications of the cerebrum caused by the action of ionizing radiations. The clinical part of the work comprises observations made as to the total reaction and electroencephalographic changes which were found to occur in the course of radiation treatment carried out on patients with newly formed parts of their skin on the upper half of the face and of the hairy part of the head. 40 patients were examined who were given treatment with radio-active cobalt, encephalography was carried out in the case of 20 patients. Irradiation was carried out by the application-distance-method, and in part of the cases by the method of introducing the needles with the radio-active cobalt into the interior of the ulcers. All patients remained fit for work in spite of a marked local skin reaction both during and after irradiation. Most of the patients showed signs of sleepiness. In the course

Card 1/3

PA. - 2099

The Functional and Morphological Modifications of the Cerebrum  
by the Action of Ionizing Rays. (Russian)

of encephalographic examinations  $\delta$ -waves of 0,4 - 0,8 sec duration occurred in the case of most patients, and further, a decrease of the amplitude of biopotentials, a hemisphere-like asymmetry, and also a reduction of the reactivity of the cerebral cortex were found. These as well as other symptoms were found to be most marked in the course of the first 24 hours after irradiation. After ten and more days the encephalogram became normalized. Thus, the changes of the biopotential of the patients are, to a certain extent, of functionally reversible character, which probably depends on the partly suppressed activity of indene.

The experimental part of the work comprises the observations of the entire reaction and of the encephalographic change occurring in the case of rabbits suffering from the effects of irradiation as long as they are still alive, and further also pathologo-anatomical examinations of their nervous systems, particularly of their brains. In the case of animals radiation sickness was caused in two ways: 1) by total irradiation with X-rays with 1000 r, 2) by irradiation of forehead and crown by means of applicators with radio-active cobalt. A total of

Card 2/3

PA - 2099

The Functional and Morphological Modifications of the Cerebrum  
by the Actions of Ionizing Rays. (Russian)

40 rabbits was examined.

Already in the course of the first few minutes after irradiation certain functional and morphological changes began to manifest themselves in the animals, which then developed to a complex of the symptoms of an acute radiation sickness. All details were discussed. The damage found to have been caused is not of diffuse, but of selective character.

ASSOCIATION: Institute of Scientific research for Radiology and Oncology  
of the Ministry of Health of the Armenian SSR

PRESENTED BY:

SUBMITTED:

AVAILABLE: Library of Congress

Card 3/3

*KYANDARYAN, K.A.*

**AUTHOR:** BEGLYARYAN, A.G., KYANDARYAN, K.A., PAPOYAN, S.A. PA - 2114

**TITLE:** The Histopathology of the Nervous System during the various Periods of Experimental Acute Radiation Sickness. (Gistopatologiya nervnoy sistemy v razlichnyye periody eksperimental'noy ostroy luchevoy bolezni, Russian).

**PERIODICAL:** Doklady Akademii Nauk SSSR, 1957, Vol 112, Nr 3, pp 422-424 (U.S.S.R.)  
Received: 3 / 1957 Reviewed: 4 / 1957

**ABSTRACT:** The authors studied the morphological structure of the reflectory arch from the receptors by way of the "sensitive conductions" and further along the propagation path of the impulse. On this occasion the coordination of the various parts of the nervous system was taken into account. Experiments were carried out with rabbits: in general the animals were irradiated once by X-rays with a radiation dose of 1000 r and with radioactive cobalt (the applicators containing the radioactive cobalt were fastened immediately on the skull within the area of the forehead and the crown) with an average radiation dose of 50.000  $\mu$ -r. Under the effect of the ionizing radiation the classical picture of acute radiation sickness developed in these rabbits, which died after different periods of time as a result of this sickness. The animals irradiated were studied with respect to biochemical hematological and electroencephalographic

Card 1/3



PA - 2114

The Histopathology of the Nervous System during the various Periods of Experimental Acute Radiation Sickness.

changes as well as with respect to destructions of protective skins.

The present paper contains the data of histological investigation. When dissecting the rabbits which died in the course of various periods of radiation sickness the authors selected pieces of skin, of the tongue, of the liver, of the aortic arch, and of the suprarenal gland, various parts of the alimentary canal, of the spinal marrow with the intervertebral cartilage of the nervus vagus with the ganglionic nodes, of the extended marrow, and of the cerebrum for purposes of histological investigation. The material examined was fixed by means of a 12% neutral formalin.

In the course of primary reactions and during the latent period the authors observed changes in the main- and receptory conductors and in the cells of the sensitive intervertebral nodes. These changes are the beginning of and are indicative of an irritation of the sensitive neurons. Also indications of an irritation of the sensitive conductors and the sensitive cells were observed. These and other changes were described as hystrophic by the authors. However, they are at first insignifi-

Card 2/3

The Histopathology of the Nervous System during the various  
Periods of Experimental Acute Radiation Sickness. PA - 2114

cant and do not yet indicate a major disturbance of the sensitive neurons. These dystrophic changes become aggravated at the outbreak of sickness. During the entire duration of the radiation sickness the nervous system is not diffusely disturbed and the parts affected most are the visceroreceptive system, the sensitive ganglionic cells, and several others. It is above all the vegetative nervous system that suffers. (No illustrations)

ASSOCIATION: Scientific Institute of Research for Radiology and Oncology  
of the Ministry of Health of the Armenian SSR.  
PRESENTED BY: ORBELI, L.A., Member of the Academy.  
SUBMITTED: 30.5.1956  
AVAILABLE: Library of Congress.

Card 3/3

KYANDARYAN, K.A.

A new type of right-sided heart. Izv.AN Arm.SSR.Biol. i sel'-  
khoz.nauki. 11 no.12:27-38 D '58. (MIRA 12:2)

1. Kafedra rentgenologii i meditsinskoy radiologii Yerevanskogo  
meditsinskogo instituta.  
(HEART--ABNORMALITIES AND DEFORMITIES)

KYANDARYAN, K.A., kand. med. nauk.

V. A. Fanardshian; on his 60th birthday. Vest. rent. 1 rad. 33 no.6:  
93-94 N-0 '58. (MIRA 12:1)

(FANARDZHIAN, VARFOLOMEI ARTEM'EVICH, 1898-

27 1220

44564

S/739/60/001/000/001/015  
E020/E185

**AUTHORS:** Fanardzhyan, V.A., Professor; Kyandaryan, K.A.,  
Candidate of Medical Sciences; Beglaryan, A.G.,  
Docent; Papoyan, S.A., Candidate of Medical Sciences;  
and Arutyunyan, R.K., Candidate of Medical Sciences.

**TITLE:** Changes in function and morphology in a number of  
organs and systems of Man and animals under the  
influence of large and small doses of ionizing  
radiation

**SOURCE:** Akademiya nauk Armyanskoy SSR. Sektor radiobiologii.  
Voprosy radiobiologii. v.1, 1960, 19-33

**TEXT:** The effects of ionizing radiation on the nervous,  
circulatory and digestive systems were clinically and experimentally  
investigated. 1) Nervous system. Electroencephalography carried  
out on 20 patients who were irradiated to the head in doses of  
4000-7000 r for the treatment of malignant conditions of the scalp  
showed the presence of delta waves of 0.4-0.8 sec duration,  
reduction in the amplitude of the biopotentials, asymmetry of the

Card 1/5

Changes in function and morphology. S/739/60/001/000/001/015  
E020/E185

hemispheres and occasionally respiratory and cardiac rhythms. These changes were most marked 24 hours after irradiation and had partly returned to normal after 10 days. Thirty persons suffering from the effects of occupational exposure to ionizing radiation were also studied; the electroencephalograms showed a predominance of rapid potentials indicating excitatory processes (7 patients), low amplitudes and slow rhythms indicating inhibition (11), or did not differ significantly from normal (11 patients). Electroencephalography carried out on 40 rabbits in which severe acute radiation sickness had been produced showed a reduction in amplitudes during the first few hours after irradiation, with slow waves of duration 0.3-0.25 sec. Histologically there was damage to the posterior root ganglia (chromatolysis of neurones) and sensory tracts (varicosity of the axons and vacuolation of the myelin sheaths). After 3 - 7 days there were motor disturbances (salivation, lacrimation, diarrhoea) and tachyrrhythmia in the electroencephalogram. Death occurred after 7 - 13 days, and in the later stages the electroencephalographic changes showed some tendency to normalization. In 2 rabbits which recovered and were

Card 2/5

Changes in function and morphology.. S/739/60/001/000/001/015  
E020/E185

examined 9 months after irradiation, the cerebral cortex contained areas where the cells were shrunken and hyperchromatic, or showed hydropic dystrophia with chromatolysis and karyocytolysis. Similar appearances were found in 11 dogs which had survived radiation sickness as the result of intensive treatment. Studies with radioactive methionine carried out in 30 white rats subjected to 200-800 r showed that incorporation into the brain was first accelerated and then depressed. The results of the studies indicate that the central nervous system is very sensitive to ionizing radiation and shows evidence of damage almost immediately. 2) Digestive system. Complex radiological and pathological investigations were carried out on dogs and rats suffering from acute radiation sickness. During the first 24 hours after irradiation the stomach in dogs showed delayed emptying and loss of tone. The contrast medium did not disappear from the stomach and small intestine until the fourth day. A similar effect was noted in rabbits. Autopsy carried out after 72 hours revealed paralytic distension of the stomach, with vacuolation of the myelin sheaths and varicosity and fragmentation of the axons in the

Card 3/5

Changes in function and morphology...

S/739/60/001/000/001/015  
E020/E185

intramural nerve plexuses. There was vascular engorgement in the gastrointestinal tract and liver. In irradiated rats the uptake of labelled methionine was increased during the first 3 hours after irradiation; after 6 hours it declined but still remained higher than control values.

3) Heart and cardiac innervation. In patients receiving a dose of 5000 - 10 000 r from a cobalt source to the head for the treatment of malignant conditions of the scalp there was some reduction in the amplitude of the auricular contractions and a prolongation of systole 4 to 5 days after irradiation. There was a reduction in voltage and deformation of the QRS complex and the T wave. The changes all reverted to normal 10 - 15 days after the end of irradiation. Among 40 persons suffering from the effects of occupational exposure to irradiation, 19 showed enlargement of the heart, reduction in the amplitude of the auricular beat was noted in 12 and blunting of the auricular waves in 9; sinus arrhythmia was present in 12, reduction of the T wave in 5 and absence in 6. In rabbits receiving irradiation to the skull in a dose of 6000 r over a period of 10 days, electrocardiography revealed arrhythmia, reduced voltage and deformation of the waveform; these changes  
Card 4/5



Changes in function and morphology...

S/739/60/001/000/001/015  
E020/E185

were at a maximum 10 to 12 days after the beginning of irradiation and then reverted to normal. In 30 rats irradiated with 200-800 r and injected with labelled methionine 1 hour later, increased incorporation into the heart muscle was noted after 1 hour; after 3 - 6 hours it declined, and after 24 hours the rate of incorporation was only 35% of the control value, in animals receiving the highest dose of radiation. Degenerative changes were found in the extra- and intramural cardiac nerves of rabbits given irradiation to the head (up to 50 000 r) or whole body (1000 r).

Conclusion: The three systems investigated are involved in the picture of acute radiation sickness at a very early stage, the nervous system being particularly sensitive.

X

Card 5/5

KYANDARYAN, K.A., starshiy nauchnyy sotrudnik; MOVSESYAN, M.A.,  
starshiy nauchnyy sotrudnik; MURADYAN, G.T., kand.biologicheskikh  
nauk; ARUTYUNYAN, R.K., mladshiy nauchnyy sotrudnik;  
MAZMANYAN, S.A., mladshiy nauchnyy sotrudnik

Diagnosis of chronic radiation sickness. Vop. radiobiol.  
[AN Arm. SSR] 1:37-40 '60. (MIRA 15:3)

L. Iz Sektora radiobiologii AN Armyanskoy SSR, Instituta  
rentgenologii i onkologii i Kliniki nervnykh bolezney.  
(RADIATION SICKNESS)

KYANDARYAN, K.A., starshiy nauchnyy sotrudnik; TORGOMYAN, G.B.,  
mladshiy nauchnyy sotrudnik

Radiation exposure of the sick and the personnel in some X-ray investigations and in the therapeutic application of radioactive isotopes. Vop. radiobiol. [AN Arm. SSR] 1:41-45 '60. (MIRA 15:3)

1. Iz Sektora radiobiologii AN Armyanskoy SSR, Instituta rentgenologii i onkologii.

(RADIATION PROTECTION)  
(RADIOISOTOPES--THERAPEUTIC USE)

KYANDARYAN, K.A., starshiy nauchnyy sotrudnik

Nuclear tests and the danger of the remote effect of ionizing radiation. Vop. radiobiol. [AN Arm. SSR] 1:241-248 '60.  
(MIRA 15:3)

1. Iz Sektora radiobiologii AN Armyanskoy SSR.  
(ATOMIC WEAPONS TESTING)  
(RADIATION PHYSIOLOGICAL EFFECT)

FANARDZHIAN, V.A., akademik; KYANDARYAN, K.A., starshiy nauchnyy sotrudnik

Ninth International Congress of Radiologists. Vop. radiobiol.  
[AN Arm. SSR] 1:249-258 '60. (MIRA 15:3)

1. Akademiya nauk Armyanskoy SSR (for Fanardzhyan).  
(RADIOLOGY---CONGRESSES)

KYANDARYAN, K.A.

Visit of American radiobiologists in Armenia. Vop. radiobiol.  
[AN Arm. SSR] 1:259 '60. (MIRA 15:3)  
(ARMENIA--RADIOBIOLOGY)  
(UNITED STATES--RADIOBIOLOGY)

DZHAGARYAN, A.Dzh., prof.; KYANDARYAN, K.A., dotsent; OGANESYAN, S.Z., kand.  
med.nauk

Surgical treatment of chronic coronary insufficiency by bilateral  
ligature of the internal mammary arteries. Trudy Erev.med.inst.  
no.11:257-260 '60. (MIRA 15:11)

1. Iz Instituta rentgeologii i onkologii (direktor - akademik  
AN Armyanskoy SSR, chlen-korrespondent AMN SSSR V.A.Fanardzhyan)  
i iz kafedry operativnoy khirurgii i topanatomii Yerevanskogo  
meditsinskogo instituta (zav. kafedroy prof. A.D.Dzhagaryan).  
(CORONARY HEART DISEASE)  
(SUBCLAVIAN ARTERY--LIGATURE)

GEL'SHTEIN, G.G.; YESIPOVA, I.K.; IVANITSKAYA, M.A.; KYANDARYAN, K.A.;  
SAVEL'YEV, V.S.; SOBOLEVA, A.D.

Congenital defect in the development of the tricuspid valve  
(Ebstein's disease). Klin. med. 38 no. 2:129-136 F '60.

(MIRA 14:1)

(TRICUSPID VALVE--ABNORMALITIES AND DEFORMITIES)



KYANDARYAN, K.A., dotsent; KAZARYAN, G.A., mladshiy nauchnyy sotrudnik

Thyroid function in the case of hereditary and acquired heart diseases. Vop. radiobiol. AN ARM. SSR 2:9-22 '61.

(MIRA 18:4)

KYANDARYAN, K.A., dotsent

Instances of congenital heart defects among member of one family.  
Vop.rent.i onk. 6:17-27 '61. (MIRA 16:2)  
(HEREDITY OF DISEASE) (HEART--DISEASES)

KYANDARYAN, K.A., dotsent

Hypoplasia of the absence of a lung and the branches of the  
pulmonary artery. Vop.rent.i onk. 6:39-46 '61. (MIRA 16:2)  
(PULMONARY ARTERY--ABNORMALITIES AND DEFORMITIES)  
(LUNGS--ABNORMALITIES AND DEFORMITIES)

KYANDARYAN, K.A.; ANZHELOV, L.G.

Thoracoabdominal and abdominal displacements of the heart. Izv.  
AN Arm. SSR. Biol. nauki 14 no.1:87-90 Ja '61. (MIRA 14:3)

1. Institut rentgenologii i onkologii AN Armyanskoy SSR i Institut  
akusherstva i ginekologii Minzdrava Armyanskoy SSR.  
(HEART—DISPLACEMENT)