

LARIONOV, L. F.

Some biological and clinical results from the investigations of the chloroethylamines as antitumor drugs. L. F. Larionov (Acad. Med. Sci., Moscow). *Brit. J. Cancer* 10, 26-32 (1956). — In rabbits bis(2-chloroethyl)methylamine (I) reduced the no. of leucocytes, lymphocytes, and pseudocoinophiles to a level dependent on the interval between doses, a 48-hr. interval being most desirable. Clinically,

10-20 injections of I at a dose of 5-6 mg. 3 times a week were used. Other drugs tested and used were 2-chloropropylbis(2-chloroethyl)amine-HCl and N,N-bis(2-chloroethyl)aniline-HCl. 2,6-Dihydroxy-4-methyl-5-[bis(2-chloroethyl)amino]pyrimidine (II) at a dose of 0.3 mg./kg. caused the gradual regression of sarcoma-45 tumors weighing 1-4 g. in 90-100% of the rats. Clinical trials showed II to have a decided therapeutic effect in Hodgkin's disease, myelogenous leukemia, and reticulosarcoma. DL-p-[Bis(2-chloroethyl)amino]phenylalanine had quite an effect on seminomas, Ewing's tumor, and angioendotheliomas. E. K. W.

LARIONOV, L.F., KANTIN, A.V.

"Cytochemical Research on Nucleoproteins in Carcinomas of Lips After Radiotherapy," by L. F. Larionov and A. V. Kantin, Voprosy Radiobiologii (Problems of Radiobiology), Leningrad, 1956, pp 280-290 (from Referativnyy Zhurnal -- Khimiya, Biologicheskaya Khimiya, No 24, 25 Dec 56, p 105, Abstract No 23711

Histochemical studies of small slices of cancerous neoplasms removed from the lips of 30 patients during various stages of therapy by radon indicate that penetrating radiations cause changes mostly in the cancerous cells that are rich with nucleoproteins located in the periphery of cellular complexes and in the zone of infiltration of the underlying tissues.

The authors think that these changes occur as a result of splitting bonds between proteins and desoxyribonucleic acid in nuclear nucleoproteins. Normal cells surrounding the tumor suffer much less.

SUM. 1287

*Handwritten:* 1. 1.

~~1. *p*-[Bis(2-chloroethyl)amino]phenylalanine. L. F. L.~~  
~~1957. E. N. Shkudinskaya, O. S. Vasina, A. S. Khokh-~~  
~~lov, and V. I. Trushchikova. U.S.S.R. 104,781, Feb. 25,~~  
~~1957.  $p$ -O<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>CH<sub>2</sub>C(NHAc)(CO<sub>2</sub>Et)<sub>2</sub> is reduced with~~  
~~H over a Raney catalyst to the *p*-H<sub>2</sub>N ester, which is con-~~  
~~densed in aq. alc. with ethylene oxide to 2-NOCH<sub>2</sub>CH<sub>2</sub>N-~~  
~~CH<sub>2</sub>CH<sub>2</sub>C(NH<sub>2</sub>)C<sub>6</sub>H<sub>4</sub>NO<sub>2</sub>. The latter is treated~~  
~~with SO<sub>2</sub> to give the free amine acid.~~  
~~2-NOCH<sub>2</sub>CH<sub>2</sub>NH<sub>2</sub>CO<sub>2</sub>H HCl salt, with Et<sub>3</sub>NH in alc.~~  
~~the free amine acid. The HCl salt, under the name of~~  
~~Sarcosine, is used for treating malignant tumors.~~

*Handwritten:* 6  
4j

M. Herzl

*Handwritten:* M. Herzl

LARIONOV, Leonid Fedorovich

[Cancer; causes, prevention, treatment] Rak; prichiny, preduprezhdenie, lechenie. Moskva, Medgiz, 1957. 102 p. (MIRA 11:6)  
(CANCER)

LARIONOV, L.F.

USSR/General Problems of Pathology - Tumors. Experimental Therapy. T-5

Abs Jour : Ref Zhur - Biol., No 3, 1958, 12705

Author : Larionov, L.F.

Inst : Not given.

Title : Chemotherapy of Malignant Tumors.

Orig Pub : Patol. fiziologiya i eksperim. terapiya, 1957, 1, No 3,  
14-21.

Abstract : No abstract.

Card 1/1

LARIONOV, I.F., professor

Cancer can be prevented. Zdorov'e 3 no.1:19-21 Ja '57. (MIRA 10:2)

1. Chlen-korrespondent Akademii meditsinskikh nauk SSSR.  
(CANCER)

LARIONOV, L.F.

LARIONOV, L.F., prof.

International Conference on the chemotherapy of cancer and leucosis  
held in Paris. Vest. AMN SSSR 12 no. 5:73-75 '57. (MIRA 11:1)  
(CANCER) (LEUCOSIS) (CHEMOTHERAPY)

L. F. LARICHOV, L. F.

AUTHOR: **LARICHOV, L.F., SOF'INA, Z.P.**

20-5-42/60

TITLE: On the Antitumoral Action of Sarcolysine Peptids. (O Protivo-opukholevom deystvii peptidov sarkolizina)

PERIODICAL: Doklady Akademii Nauk SSSR, 1957, Vol 114, Nr 5, pp 1070-1072 (U.S.S.R.)

ABSTRACT: There exist at present already some synthetic preparations with alkylating action that possess strong antitumoral properties. They have however essential defects. In the first place they are effective only in the case of tumors or tumor-like diseases of the hematopoietic system. Those which act on real tumors (sarcolysine, TEP) only influence a very limited number of them. The second deficiency is that they possess considerable toxicity and are therapeutically active only in the highest endurable doses. This indicates little selectivity of their action on tumors. The basic idea of the preparation of sarcolysine, which, among the existing preparations is apparently the most selective against some types of tumors, was: to utilize the metabolites, especially amino acids, as "carriers" of the alkylating group and their "introducer" to the tumors. There seems to exist a possibility to obtain new preparations by replacement of the "carriers" of chloroethylamine groups by others. In this direction a new way is indicated by this work. It is a matter of addition of a second metabolite by the amide linkage to the "primary carrier" of the chloroethylamine group, especially of a second amino acid. The following peptides of sarcolysine were synthesized: 1) N-formly-sarcolysyl-phenyl alanine-ethylether, 2) N-formly-sarcolysyl-valine-ethylether and

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On the Antitumoral Action of Sarcocollins Peptides.

20-5-42/60

3) N-formyl-sarcocollin-tryptophan-methylether. All these compounds which are not easily dissolved in water proved to be only slightly toxic. Tab. 1 shows that the two first of the studied substances exercise an antituberculous influence sarcoma on mice and rats which equals that of sarcocollins. By microscope no tumor cells were detected in the small nodes which were on the places of the tumors. At the same time body-weight decreases to some extent as a result of a sarcocollins cure, while this was not the case in the peptidetest. Histological investigation of the animals killed after the test neither showed changes in intestines or marrow, nor marked splenic atrophy. The third compound (---methylether) proved to be inactive. It may be assumed that the high selectivity of the action of peptides finds expression only if they contain the corresponding peptidases when penetrating into the tumoral tissue. By influence of the latter a cleavage takes place in the peptide, and sarcocollins as the active part of the preparation is liberated. The data on enzymatic hydrolysis of the amide linkage of the simplest amides of aromatic chloroethylamines seem to indicate this possibility. From this standpoint the lacking action of the preparations on the hematogenic organs may possibly be explained by the weak activity of the corresponding enzymes in them. The different power of action of one and the same preparation and different tumors may possibly be explained in some extent by the different activity of corresponding peptidases in them. In a similar manner the activity of compound 3

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On the Antitumoral Action of Sarcosine Peptides.  
may be explained against the tumore investigated.  
(3 figures, 1 table, 4 Slavic references)

20-5-42/60

ASSOCIATION

Institute for Experimental Pathology and Cancer Therapy of the  
Academy of Medical Science of the U. S.S.R. in Corporation with  
the Laboratory of the Institute for Elementary-Organic Compounds of  
the Academy of Sciences of the U.S.S.R.  
KNUNYANTS I.L., Member of the Academy  
26.4.1957  
Library of Congress.

PRESENTED BY  
SUBMITTED  
AVAILABLE  
Card 3/3

GLAZUNOV, M.F.; KUZ'MINA, Ye.M.; LAZAREVA, A.P.; LARIONOV, L.F.; PARSHIN, A.N.; PETROV, N.N., prof.; PETROV, Yu.V.; RAKOV, A.I.; SEREBROV, A.I.; Kholdin, S.A.; CHAKLIN, A.V.; SHABAD, L.M.; RULEVA, M.S., tekhn. red.

[Manual on general oncology; in summary form for medical students and physicians of all specialties] Rukovodstvo po obsheei onkologii; v kratkom izlozhenii dlia studentov-medikov i vrachei vsekh spetsial'nostei. Leningrad, Gos. izd-vo med. lit-ry Medgiz Leningr. otd-nie, 1958. 366 p.  
(ONCOLOGY) (MIRA 14:7)

LARIONOV, L.F.

AUTHOR:

Zil'ber, L.A., Active Member of the Academy of Medical Sciences of the USSR

SOV/26-58-12-11/44

TITLE:

At the VIIth International Cancer Congress (Na VII mezhdunarodnom rakovom kongresse)

PERIODICAL:

Priroda, 1958, Nr 12, pp 67-70 (USSR)

ABSTRACT:

The Seventh International Cancer Congress that took place from 6 to 12 July 1958 in London was attended by about 2,500 delegates from over 60 countries. A total of 600 papers were read. In one of the plenary sessions limited to themes in the fight against cancer, L.F. Larionov (USSR) reported on cancer chemotherapy. The following papers were read by Soviet researchers: N.N. Petrov and L.M. Shabad, in detail on the origin of tumors in monkeys under the influence of radioactive substances and on the development of cancer caused by endo- and exogenous factors including those in the surrounding medium. One of the strongest cancer-producing substances (3.4-benzopyrene) has been discovered in the air of several cities. This may be one of the causes of cancer of the lungs. A.D. Timofeyevskiy and his assistants found in 40 to 50 % of

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At the VIIth International Cancer Congress

SOV/26-58-12-11/44

various tumors in man, virus-like globular corpuscles of 40 to 80 millimicron dimensions which propagated in cultures of tissues and in the choricallantoic membrane of the chick embryo. R.Ye. Kavetskiy gave data on the dependence of the effect of the virus of cancer of the mammary glands on the condition of the hormonal balance controlled by the central nervous system. L.A. Mil'ber stated that the method of precipitation into jelly permits the development of new specific antigens, absent in normal tissues, in a tumor that originated and was passed on in inbred mice; with this a simplification of the antigen structure is given, which is connected with the disappearance of certain antigens of the normal tissue from the tumor. N.N. Blokhin read a paper on chemotherapeutic preparations obtained by L.F. Larionov and co-researchers, and said that such preparations as embikhin, dopan etc. are on a level with similar foreign products. Ye.Ye. Pogosyants and his assistants reported on the hamster as an animal for the study of cancer; A.I. Savitskiy and S.A. Kholdin on clinical data concerning the treatment of cancer of the lungs and the breast in Soviet clinics; Ye.G. Prasdnikova on the organization of the anticancer service in the USSR. Of the 50-man Soviet delegation, individual members

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At the VIIth International Cancer Congress

SOV/26-58-12-11/44

were active in presentations and discussions at almost all sections of the congress. Professor N.N. Blokkin was elected vice-president (1 of 5) of the International Society for the Fight Against Cancer for the next 4-year period. - Data on the study of the metabolism of the hepatoma in mice caused by chrysoidin were presented by Albert and other researchers from Poland. Graffi from the USSR gave data on the virus of myeloblastic leukemia in mice; the virus was separated out from tumors which had always been treated as non-transferable by filtrates and not containing any viruses (e.g. Ehrlich's cancer). The next Cancer Congress will be in 1962 in Moscow

ASSOCIATION: Institut epidemiologii i mikrobiologii im. N.F. Gamalei, Moskva (The Institute of Epidemiology and Microbiology imeni N.F. Gamalei, Moscow)

Card 3/3

LARIONOV, L.F., prof.

Present state of chemotherapy of cancer and prospects of its  
development. Vest.AMN SSSR 13 no.2:8-14 '58. (MIRA 11:3)

1. Chlen-korrespondent AMN SSSR, Laboratoriya eksperimental'noy  
khimioterapii Instituta eksperimental'noy patologii i terapii raka  
AMN SSSR.

(NEOPLASMS, ther.  
chemother., current status, review (Rus)

EXCERPTA MEDICA Sec 16 Vol 6/10 Cancer Oct 58

3830. *Histological and histochemical changes of rat sarcoma in the process of its cure by sarcolysin and dopan (Russian text)* LARIONOV L. F. and PRESSOV M. A. *Arkh. Patol.* 1958, 20/1 (32-39) Illus. 18

The investigations were performed on rats bearing sarcoma 45. Sarcolysin was administered i.p.: 15 mg./kg. body weight once, or repeatedly 5 mg./kg. at 72-hour intervals. Dopan was given by sound in the amount of 0.3 mg. kg. daily, or 0.75 mg./kg. at 72-hour intervals. 137 rats were treated with sarcolysin, 46 with dopan, and 90 served as controls. The degree of destruction of the neoplastic cells was found to depend on the dose used. With sarcolysin in the amount of 15 mg. kg. this destruction occurred as early as within 3 hr.; the same compound given in the dose of 5 mg./kg. induced it slightly later, as did dopan. Both substances caused a decrease or complete disappearance of the mitotic activity. The whole cells and their nuclei increased in size, lipids appearing in the cytoplasm. The nuclear substance disintegrated into droplets, the latter being, in the authors' opinion, nucleoproteins and not free nucleic acids. A part of the cells showed lysis but no nuclear disintegration. As a secondary phenomenon there was the reaction of the stroma resulting in cicatrization of the necrotic lesions. During the treatment with these substances, parallel to changes of the nuclear substance, the alkaline phosphatase, which in non-treated tumours is mostly localized in the nuclei and nucleoli, makes its appearance in the cytoplasm and afterwards even in the stroma, this phenomenon promoting the lysis of disintegrated cells. Thus the effect of both compounds induced in all mice a full regression of the tumour.

Albert - Wroclaw



VODOLAZSKAYA, N.A., NOVIKOVA, M.A., SHKODINSKAYA, Ye.N., VASINA, O.S.  
BERLIN, A.Ya., LARIONOV, L.F.

Anti-tumor effect of certain sarcolysin derivatives; dl-p-di-  
(chloroethyl) aminophenyl-lalanine [with summary in English]  
Biul. eksp. biol. i med. 44 no. 11:76-81 JI-Ag '58 (MIRA 11:11)

1. Iz laboratorii eksperimental'noy khimioterapii (zav. - chlen-  
korrespondent AMN SSSR L.F. Larionov) i laboratorii khimicheskogo  
sinteza (zav. - prof. A.Ya. Berlin) Instituta eksperimental'noy  
patologii i terapii raka (dir. - chlen-korrespondent AMN SSSR  
N.N. Blokhin) AMN SSSR, Moskva. Predstavlena deystvitel'nym  
chlenom AMN SSSR V.V. Zakusovym.

(NITROGEN MUSTARDS, effect,  
dl-p-di- (Chloroethyl) aminophenylalanine,  
on exper. spindle cell sarcoma (Rus))  
(SARCOMA, experimental,  
dl-p-di- (chloroethyl) aminophenylalanine (Rus))

LARIONOV, L.F.; ZIV, M.A.

Late results of chemotherapy in lymphogranulomatosis. Vop.  
onk. 4 no.2:161-166 '58. (MIRA 12:8)

1. Iz Instituta onkologii AMN SSSR (dir. - deystvitel'nyy chlen  
AMN SSSR prof.A.I.Serebrov). Adres avtorov: Moskva, 3-ya  
Meshchanskaya ul., d.61/2, korp.9, Institut eksperimental'noy  
patologii i terapii raka.

(NITROGEN MUSTARDS, ther. use

N-bis (2-chloroethyl)-2-chloropropylamine in  
Hodgkin's dis., late results (Rus))

(HODGKIN'S DISEASE, ther.

N-bis (2-chloroethyl)-2-chloropropylamine,  
late results (Rus))

LARIONOV, L.F., BOGOMAZ, L.A., DMITRIYEVA, Ye.V. IZVOLININA, Ye.I.  
RAKHAYEVA, O.I., TROYANOVSKIY, D.L. (Leningrad)

Sarcolysin therapy in multiple myeloma. Vrach.delo no.8:857-858  
Ag '58 (MIRA 11:8)

1. Bol'nitsa imeni Sverdlova.  
(MARROW--TUMORS)  
(CYTOTOXIC DRUGS)

LARICNOV, Leonid F.,

"The Present Status and Future Prospects of Cancer Chemotherapy  
by the Use of Alkylating Agents," paper presented at 7th Int'l Cancer  
Congress, London, 6-12 July 1958.

Institute of Oncology, Academy of Medical Sciences.

LARIONOV, Leonid Fedorovich, prof.; VAYNTSVEYG, G.Ye., red.; LYUDKOVSKAYA,  
N.I., tekhn.red.

[Cancer; causes, prevention, and treatment] Rak; prichiny, predupre-  
zhdenie, lechenie. Izd.2. Moskva, Gos.izd-vo med.lit-ry, 1959.  
105 p. (MIRA 13:6)

1. Chlen-korrespondent Akademii meditsinskikh nauk SSSR (for Larionov).  
(CANCER)

LARIONOV, Leonid Fedorovich

[Cancer; causes, prevention, treatment] Rak; prichiny,  
preduprezhdenie, lechanie. Izd.2. Moskva, Medgiz, 1959.  
105 p. (MIRA 13:12)

(CANCER)

DAVYDOVSKIY, I.V., prof. (Moskva), otv.red.; BLOKHIN, N.N., prof. (Moskva), red.; VASIL'YEV, Yu.M., kand.med.nauk, red.; ZHARSKIY, I.B., prof. (Moskva), red.; ZIL'BER, L.A., prof. (Moskva), red.; KOSYAKOV, P.N., prof., red.; ~~LARIONOV, L.F.~~ prof. (Moskva), red.; SAVITSKIY, A.I., prof. (Moskva), red.; SEREBROV, A.I., prof., red.; CHAKLIN, A.V., kand.med.nauk (Leningrad), red.; SHABAD, L.M., prof. (Leningrad), red.; AVERBAKH, M.M., red.; ROMANOVA, Z.A., tekhn.red.

[Malignant neoplasms; transactions of the Tenth Session of the General Assembly of the Academy of Medical Sciences of the U.S.S.R.]  
Zlokachestvennye novoobrazovaniia; trudy X sessii obshchego sobraniia Akademii meditsinskikh nauk SSSR. Otvet.red. I.V.Davydovskii. Red.kollegia: N.N.Blokhin i dr. Moskva, Gos.izd-vo med.lit-ry, 1959. 262 p.  
(MIRA 14:1)

1. Akademiya meditsinskikh nauk SSSR, Moscow. 10. sessia, Moscow, 1956. 2. Deystvitel'nyye chleny AMN SSSR (for Davydovskiy, Zil'ber, Serebrov). 3. Chleny-korrespondenty AMN SSSR (for Blokhin, Larionov, Savitskiy, Shabad).  
(CANCER)

LARIONOV, L.F., prof. (Moskva)

Adaptational-dystrophic theory of the development of malignant tumors. Pat.fiziol. i eksp.terap. 3 no.2:87-90 Mr-Apr '59.  
(MIRA 12:6)

1. Chlen-korrespondent AMN SSSR.  
(NEOPLASMS, etiol. & pathogen.  
adaptational-dystrophic theory, review (Rus))



LARIONOV, L.F. (Moskva, G-48, ul. Usacheva, d.19-a, korp.1, kv.45)

Present state and prospects of chemotherapy for malignant tumors using  
alkylating compounds. Vop.onk. 5 no.3:290-298 '59. (MIRA 12:12)

1. Institute of Experimental Pathology and Therapy of Cancer, Moscow.  
(CYTOTOXIC DRUGS,  
alkylating cpds., review (Rus))

LARIONOV, L.F., prof.

Results of two years of work in the creation of anticancerous preparations of the alkylating metabolite type. Vest. AMN SSSR 14 no.6:25-37 '59. (MIRA 13:6)

1. Institut eksperimental'noy \* klinicheskoy onkologii AMN SSSR.  
Chlen-korrespondent AMN SSSR.  
(CYTOTOXIC DRUGS) (CANCER)

EXCERPTA MEDICA Sec 5 Vol 12/11 General Path, Nov 59

3289. PRE-CANCER AS A PATHOLOGICAL PROCESS (Russian text) - Lario-  
nov L. F. - ARKH. PATOL. 1959, 21/3 (3-9)

The opinion that 'pre-cancer' is a very complicated problem is due to the lack of standardized nomenclature. When using the term, clinicians refer to several tissue processes, which in certain cases form the basis for malignant growths. These changes should be termed 'potentially pre-tumorous'. In respect of the morbid anatomy, these changes are focal proliferations in chronic dystrophic conditions. In this condition a discrepancy exists between the number of cells and an insufficient supply of blood to the region. As far as signs for a malignant development are present, this should be expressed in the terminology but the term 'pre-cancer' should not be used. If this proposition were accepted, the term 'pre-cancer' would be more accurately and theoretically founded.

Brandt - Berlin (V, 16)

LARIONOV, I. F.

"Polypeptides."

report to be presented at the Symposium on Cell Biology and Growth Inhibition,  
Louvain, Belgium, 13-18 June 1960.

*Active Member, USSR Academy of Sciences.*

LARIONOV, L.F., prof.

Principles of chemotherapy in oncology. Vest. AMN SSSR 15 no. 4:  
29-36 '60. (MIRA 14:5)

1. Institut eksperimental'noy i klinicheskoy onkologii. AMN SSSR.  
Chlen-korrespondent AMN SSSR.  
(TUMORS) (CYTOTOXIC DRUGS)

LARIONOV, L.F., prof.

Chemical weapon. Znan.sila 35 no.5:18-19 My '60. (MIRA 13:7)

1. Chlen-korrespondent AMN SSSR.  
(CANCER) (CHEMICALS--PHYSIOLOGICAL EFFECT)

LARIONOV, Leonid F. (USSR)

"Adaptive-dystrophic" theory of the pathogenesis of cancer."

report submitted for the European Conference on Tumor Biology (UICC),  
Warsaw, Poland  
22-27 May 1961

Larionov, L. F.-Inst of Experimental and Clinical Oncology, 61, Third  
Meshchanskaya Street, Moskva

LARIONOV, L.P., prof. (Moskva)

Complex alkylating metabolites as a new class of antitumorous  
compounds. Pat. fiziol. i eksp. terap. 5 no.2:3-9 Mr-Apr '61.  
(MIRA 14:5)

1. Iz Instituta eksperimental'noy i klinicheskoy onkologii (dir. -  
deystvitel'nyy chlen AMN SSSR prof. N.N.Blokhin) AMN SSSR.  
(PEPTIDES) (CANCER)



LARIONOV, L.F.; PLATONOVA, G.N.

Effect of (2-thiazolyl)-amide of N-acetylsarcosine (asazol)  
on the growth of transplanted tumors. Biul. eksp. biol. i med.  
51 no.3:94-96 Mr '61. (MIRA 14:5)

1. Iz laboratorii eksperimental'noy khimioterapii (zav. - chlen-  
korrespondent AMN SSSR prof. L.F.Larionov) Instituta eksperimental'noy  
i klinicheskoy onkologii (dir. - deystvitel'nyy chlen AMN SSSR N.N.  
Blokhin) AMN SSSR, Moskva. Predstavlena deystvitel'nyy chlenom  
AMN SSSR N.N.Blokhinym.

(ALANINE)

SHKODINSKAYA, Ye.N.; VASINA, O.S.; BERLIN, A.Ya.; SOF'INA, Z.P.; LARIONOV, L.F.

p-Di-(2-chlorethyl)-aminophenylalanine (sarcolysine) and its derivatives. Part 9: Optically active cytotoxic peptides. Zhur. ob. khim. 32 no.1:324-325 Ja '62. (MIRA 15:2)

1. Institut eksperimental'noy i klinicheskoy onkologii AMN SSSR.  
(Alanine) (Peptides)

ROMANOVA, I.N.; LARIONOV, L.F.

Mechanism of the action of sarcolysin peptides on tumor cells.

Vop. med. khim. 7 no.5:479-484 S-0 '61.

(MIRA 14:10)

1. The Laboratory of Biochemistry and the Laboratory of the Experimental  
Chemotherapy of the Institute of Experimental and Clinical Oncology  
of the Academy of Medical Sciences of the U.S.S.R.

(PEPTIDES)

(TUMORS)

LARIONOV, Leonid Fedorovich, prof.; ASTRAKHAN, V.I., red.; KUZ'MINA,  
N.S., tekhn. red.

[Chemotherapy of malignant tumors] Khimioterapiia zlokachestven-  
nykh opukholei. Moskva, Medgiz, 1962. 463 p. (MIRA 15:9)

1. Chlen-korrespondent Akademii meditsinskikh nauk SSSR (for  
Larionov).

(CHEMOTHERAPY) (CANCER)

LARIONOV, L.F.; SPASSKAYA, I.G.

Antineoplastic properties of N,N-bis-( $\beta$ -chloroethyl)-lysine derivatives ("lysepsin"). Vop.onk. 7 no.11:75-79 '61.

(MIRA 15:5)

1. Iz laboratorii eksperimental'noy khimioterapii (zav. - chlen-korrespondent AMN SSSR prof. L.F. Larionov) Instituta eksperimental'noy i klinicheskoy onkologii AMN SSSR (dir. - deyst. chlen AMN SSSR prof. N.N. Blokhin).

(LYSINE)

(CYTOTOXIC DRUGS)

BABCHIN, I.S., prof.; BABANOVA, A.G., doktor med. nauk; BLOKHIN, N.N., prof.; BONDARCHUK, A.V., prof.; GAL'PERIN, M.D., prof.; GOL'DSHTEYN, L.M., prof. [deceased]; DYMARSKIY, L.Yu., kand. med. nauk; KARPOV, N.A., prof.; KOYRO, M.A., nauchn. sotr.; LARIONOV, L.F., prof.; LITVINOVA, Ye.V., kand. med. nauk; MEL'NIKOV, R.A., kand. med. nauk; NECHAYEVA, I.D., doktor med. nauk; PETROV, Nikolay Nikolayevich, prof.; PETROV, Yu.V., kand. med. nauk; RAKOV, A.I., prof.; ROGOVENKO, S.S., kand. med. nauk; SENDUL'SKIY, I.Ya., prof.; SEREBROV, A.I., prof.; SMIRNOVA, I.N., kand. med. nauk; TAL'MAN, I.M., prof.; TOBILEVICH, V.P., prof.; TRUKHALEV, A.I., kand. med. nauk; Kholdin, Semen Abramovich, prof.; CHEKHARINA, Ye.A., kand. med. nauk; CHECHULIN, A.S., kand. med. nauk; SHAAK, V.A., prof. [deceased]; SHANIN, A.P., prof.; SHAPIRO, I.N., prof. [deceased]; SHEMYAKINA, T.V., kand. med. nauk; SHERMAN, S.I., prof.; ABRAMOV, L.V., red.; LEBEDEVA, Z.V., tekhn. red.

[Malignant tumors] Zlokachestvennye opukholi; klinicheskoe rukovodstvo. Leningrad, Medgiz. Vol.3. Pts.1-2. 1962. (MIRA 16:5)

1. Deystvitel'nyy chlen Akademii meditsinskikh nauk SSSR (for Blokhin, Petrov, Serebrov). 2. Chlen-korrespondent Akademii meditsinskikh nauk SSSR (for Kholdin).

(CANCER)

LARIONOV, L. F.

"Anticancer Agents of Complex Alkylizing Metabolite Type."

paper presented at the Second Hungarian Conference on Therapy  
and Pharmacological Research, Budapest, Hungary, 2-7 Oct 62

Inst. of Experimental and Clinical Oncology of the Acad.  
of Medical Sciences, USSR.

LARIONOV, L.F.; PLATONOVA, G.N.; SPASSKAYA, I.G.; TOLKACHEVA, Ye.N.

Reduction of the toxic action of lethal doses of antineoplastic preparations using aminoethylisothiuronium. *Biul. eksp. biol. i med.* 53 no.6:68-71 Je '62. (MIRA 15:10)

1. Iz laboratorii eksperimental'noy khimioterapii (zav. - chlen-korrespondent AMN SSSR prof. L.F.Larionov) Instituta eksperimental'noy i klinicheskoy onkologii (dir. - deystvitel'nyy chlen AMN SSSR N.N.Blokhin) i iz laboratorii teoreticheskikh osnov biologicheskoy zashchity (zav. - doktor biologicheskikh nauk N.I.Shapiro) Instituta biofiziki (dir. - chlen-korrespondent AN SSSR prof. G.M.Frank) AN SSSR, Moskva. Predstavlena deystvitel'nym chlenom AMN SSSR N.N.Blokhinym.

(CYTOTOXIC DRUGS) (PSEUDOUREA)



LARIONOV, L.F.

GOFMAN, A.; FREY, A.I.; RUTSHMANN, I.; OTT, Kh.; SHEMYAKIN, M.M.; KISHFALUDI, L.; KOCHETKOV, N.K.; DEREVITSKAYA, V.A.; PROKOF'YEV, M.A.; SHABAROVA, Z.A.; FILIPPOVA, L.A.; SHANKMAN, S.; KHAYGA, S.; LIV, F.; ROBERTS, M.Ye.; GAVRILOV, N.I.; AKIMOVA, L.N.; KHLUDOVA, M.S.; MAKSIMOV, V.I.; IZELIN, B.M.; SHEPPARD, R.K.; SHKODINSKAYA, Ye.N.; VASINA, O.S.; BERLIN, A.Ye.; SOF'INA, Z.P.; LARIONOV, L.F.; KNUNYANTS, I.L.; GOLUBEVA, N.Ye.; KARPAVICHUS, K.I.; KIL'DISHEVA, O.V.; MEDZIGRADSKIY, K.; KAFTAR, M.; LEV, M.; KORENSKI, F.; BUASSONA, R.A.; GUTTMAN, St.; KHOYGENIN, R.L.; ZHAKENO, P.A.; BAZHUS, S.; LENARD, K.; DUAL'SKI, S.; SHREDER, Ye.; SHMIKHEN, R.; KHOKHLOV, A.S.

Results of the Fourth European Symposium on the chemistry of peptides. Abstracts of reports. Zhur. VKHO 7 no.4:468-476 '62. (MIRA 15:8)

1. Aktsionernoye obshchestvo "Sandos", Bazel', Shveytsariya (for Gofman, Frey, Ott, Rutshmann). 2. Farmatsevticheskaya fabrika "G.Rikhter", Budapesht, Vengriya (for Kishfaludi, Korenski, Dualski). 3. Institut khimii prirodnykh soyedineniy AN SSSR, Moskva (for Kochetkov, Derevitskaya, Shemyakin, Khokhlov). 4. Laboratoriya khimii belka Moskovskogo gosudarstvennogo universiteta (for Prokof'yev, Shabarova, Filippova, Gavrilov, Akimova, Khludova). 5. Fond meditsinskikh issledovaniy, Passadena, Kaliforniya, Sev.Soyed.Shtaty Ameriki (for Shankman, Khayga, Liv, Roberts). 6. Laboratoriya khimii belka Instituta organicheskoy (Continued on next card)

Gofman, A.,---(Continued) Card 2.

khimii AN SSSR, Moskva (for Maksimov). 7. Aktsionernoye obshchestvo "TSiba", Bazel', Shveytsariya (for Izelin). 8. Liverpul'skiy universitet, Angliya (for Sheppard). 9. Institut eksperimental'noy i klinicheskoy onkolofii AMN SSSR, Moskva (for Shkodinskaya, Vasina, Berlin, Sof'ina, Larionov). 10. Institut elementoorganicheskikh soyedineniy AN SSSR, Moskva (for Knunyants, Golubeva, Karpavichus, Kil'disheva). 11. Institut organicheskoy khimii Budapeshtskogo universiteta, Vengriya (for Medzigradskiy, Kaftar, Lev). 12. Farmatsevticheskiy otdel Aktsionernogo obshchestva "Sandos", Bazel', Shveytsariya (for Buassona, Guttman, Khoxygenin, Zhakeno, Rutshmann). 13. Issledovatel'skiy institut farmatsevticheskoy promyshlennosti, Budapesht, Vengriya (for Bazhus, Lenard). 14. Aktsionernoye obshchestvo "Shering", Zapadnyy Berlin (for Shreder, Shmikhen).  
(Peptides--Congresses)

LARIONOV, Leonid Fedorovich; LAGUTINA, Ye.V., red.; NAZAROVA, A.S.,  
tekhn. red.

[Cancer can be prevented] Rak možno predupredit'. Moskva,  
Izd-vo "Znanie," 1963. 55 p. (Narodnyi universitet kul'tury:  
Fakul'tet zdorov'ia, no.4) (MIRA 16:3)

1. Chlen-korrespondent Akademii meditsinskikh nauk (for  
Larionov).

(CANCER--PREVENTION)

LARIONOV, L. F.  
AID Nr. 995-2 21 June

PROPHYLACTIC EFFECT OF SEROTONIN ON ACUTE RADIATION SICKNESS  
IN MONKEYS (USSR)

Semenov, L. F., L. F. Larionov, M. F. Petrova, Ye. Ch. Pukhal'skaya,  
and K. A. Zeytunyan. Meditsinskaya radiologiya, v. 8, no. 4, Apr 1963,  
58-62. S/241/63/008/004/002/006

Rhesus monkeys weighing 2.5 to 4.0 kg were subjected to total-body  $\gamma$ -radiation ( $Co^{60}$ ) with a single dose of 630 r ( $LD_{90}$ ) or 700 r ( $LD_{100}$ ) at 96 to 102 r/min. To prevent dysentery, the animals were given levomycetin (400 mg per animal) and biomycin (100 mg per animal) every other day starting 24 hrs after exposure. Serotonin hydrochloride was injected intramuscularly (aqueous solutions) in doses of 50 to 175 mg/kg or 35 to 40 mg/kg 5 to 10 min before irradiation; doses of 100, 150, and 175 mg/kg proved toxic. Spasms, salivation, and contraction of the muscles of the extremities were observed a few minutes after the injection of serotonin, followed by coma and death within 2 to 40 hrs. A dose of 50 mg/kg of serotonin caused spasms and coma which gradually disappeared, after which the animals recovered. Doses below 40 mg/kg caused slight hyperemia of facial

Card 1/2

AID Nr. 995-2 21 June

8/241/63/008/004/002/006

PROPHYLACTIC EFFECT OF SEROTONIN [Cont'd]

skin and increased the muscular tonus of the toes but did not markedly impair the vital activity of the animals. Acute radiation sickness induced in rhesus monkeys by  $\gamma$ -irradiation with 630 r caused the death of most of the animals (controls), although prophylactic use of serotonin (35 to 40 mg/kg) alleviated the symptoms of radiation sickness and increased the survival rate (6 monkeys out of 17 survived after a 30-day observation period). When subjected to  $\gamma$ -irradiation with 700 r ( $> LD_{100}$ ) and treated with serotonin hydrochloride (35 to 40 mg/kg prior to exposure) and antibiotics, the monkeys succumbed within 17 days. [SGM]

Card 2/2

LARIONOV, Leonid Fedorovich, prof.; NEYMAN, M.I., red.; CHULKOV,  
I.F., tekhn. red.

[Cancer; its causes, prevention and treatment] Rak; pri-  
chiny, preduprezhdenie i lechenie. Izd.3. Moskva,  
[Medgiz], 1963. 106 p.  
(MIRA 17:1)

1. Chlen-korrespondent AMN SSSR (for Larionov).

\*

SEMENOV, L.F.; LARIONOV, L.F.; PETROVA, M.F.; PUKHAL'SKAYA, Ye.Ch.;  
ZEYTUNYAN, K.A.

Use of serotonin in the prevention of acute radiation sickness  
in monkeys. Med. rad. 8 no.4:58-62 Ap'63 (MIRA 17:2)

1. Iz Instituta eksperimental'noy patologii i terapii AMN SSSR,  
Sukhumi i Instituta eksperimental'noy i klinicheskoy onkologii  
AMN SSSR, Moskva.

LARIONOV, L.F.; CHUDAKOVA, M.A.

Use of sarcolysine with colchamine in cancer of the esophagus.  
Vop. onk. 9 no.12:3-7 '63. (MIRA 17:12)

1. Iz Tsentral'noy klinicheskoy rentgeno-radiologicheskoy bol'nitsy Ministerstva putey soobshcheniya (ispolnyayushchiy obyazannosti nachal'nika - A.A. Sokolova). Adres avtorov: Moskva, D-367, Volokolamskoye shosse, 30. Institut eksperimental'noy i klinicheskoy onkologii AMN SSSR.



SPASSKAYA, I.G.; PLATONOVA, G.N.; SOLOPAYEVA, I.M.; SEMENOV, L.F.;  
ZEYTUNYAN, K.A.; LARIONOV, L.F.

Reducing the toxicity of dcpn by means of aminoethylisothiuronium  
(AET) in experiments on monkeys. Vop. onk. 9 no.12:44-46 '63.  
(MIRA 17:12)

1. Iz laboratorii eksperimental'noy khimioterapii (zav. - chlen-  
korrespondent AMN SSSR prof. L.F. Larionov) Instituta eksperimen-  
tal'noy i klinicheskoy onkologii AMN SSSR (direktor-deystvite'nyy  
chlen AMN SSSR prof. N.N. Blokhin) i iz laboratorii radiobiologii  
(zav. - L.F. Semenov) Instituta eksperimental'noy patologii i te-  
rapii (direktor - prof. B.A. Lapin). Adres avtorov: Moskva, I-110,  
ul. Shechepkina, 61/2, korp.9, Institut eksperimental'noy i klini-  
cheskoy onkologii AMN SSSR.

LARIONOV, L.F.; PLATONOVA, G.N.; SPASSKAYA, I.G.

Effect of aminoethyl isothiuronium on the specific action of some  
antineoplastic preparations. *Biul. eksp. biol. i med.* 57 no. 5: 73-76  
My '64. (MIRA 18:2)

1. Laboratoriya eksperimental'noy khimioterapii (zav. - chlen-  
korrespondent AMN SSSR prof. L.F. Larionov) Instituta eksperimental'-  
noy i klinicheskoy onkologii (dir. - deystvitel'nyy chlen AMN SSSR  
prof. N.N. Elokhin) AMN SSSR, Moskva. Submitted April 19, 1963.

LARIONOV, I.F.; BUKHAROVA, I.K.; SHAMAYEVA, Ye.M.

Experimental study of the toxicity and the antineoplastic activity  
of the ethyl ester of acetylsarcosine-L-leucine. Vop. onk. 11  
no.4:78-80 '65. (MIRA 18:8)

1. Iz laboratorii eksperimental'noy khimioterapii (zav. - chlen-  
korrespondent AMN SSSR prof. I.F.Larionov) Instituta eksperimental'noy  
i klinicheskoy onkologii AMN SSSR (direktor - deystvitel'nyy  
chlen AMN SSSR prof. N.N.Blokhin).

LARIONOV, L.F.

Some trends in the development of antineoplastic preparations. Vest. AMN SSSR no.4:26-34 '65. (MIRA 18:10)

1. Institut eksperimental'noy i klinicheskoy onkologii  
AMN SSSR, Moskva.

GARIN, A.M.; ASTRAKHAN, V.I.; BYCHKOV, M.B.; LARIONOV, L.P.; PEREVODCHIKOVA, N.I.

Clinical use of high single doses of sarcosine and endoxan  
(cyclophosphane). Vop. onk. 11 no.10:3-9 '65.

(MIRA 18:10)

1. Iz terapevticheskogo otdeleniya (zav. - doktor med.nauk V.I. Astrakhan) Instituta eksperimental'noy i klinicheskoy onkologii AMN SSSR (direktor i zav. klinicheskim otdelom - deystvitel'nyy chlen AMN SSSR prof. N.N.Elekhn).

LARIONOV, Leonid Georgiyevich; ZUBKOV, M.A., otv.red.; LEVINSKAYA,  
N.Z., tekhn.red.

[Decisive years] Reshaishchie gody. Moskva, Gos.izd-vo  
detsoi lit-ry M-va prosv.RSFSR, 1959. 30 p. (MIRA 12:8)  
(Electrification)

KRAVCHINA, Ivan Petrovich; ~~LARIONOV, Lenarm Petrovich~~; DENISOVA, T.V.,  
inzh., red.; BOBROVA, Ye.N., tekhn.red.

[Rheostatic tests of TE3 diesel locomotives in the car barn]  
Reostatnye ispytaniia teplovozov TE3 v depo. Moskva, Vses.  
izdatel'sko-poligr.ob"edinenie M-va putei soobshchenia, 1960.  
40 p. (MIRA 13:10)

(Diesel locomotives--Testing)

LARIONOV, L.V.

VESHEV, A.V.; MEYER, V.A.; LARIONOV, L.V.; BARKHATOV, D.R.

Magnetic susceptibility logging in slightly magnetic rocks.  
Vop.rud.geofiz. no.1:69-78 '57. (MIRA 10:10)  
(Borings) (Prospecting--Geophysical methods)



VESH'EV, A.Y.; MIZYUK, L.Ya.; PETROV, G.A.; FOKIN, A.F.; CHIR'YEV, A.N.:  
Prinimali uchastiye: ZUBOV, V.G.; LARIONOV, L.V.. KORCHAGIN,  
V.I., red.izd-va; BYKOVA, V.V., tekhn.red.

[ESK-1 electronic switch compensator and KSR-1 and KSRM-1  
electronic computer compensators for electric prospecting]  
Elektronnaya elektrorazvedchnaya apparatura ESK-1, KSR-1  
i KSRM-1. Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po geol.  
i okhrane neдр, 1959. 103 p.

(MIRA 13:5)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut metodiki i  
tekhniki razvedki (VITR) (for Veshev, Larionov, Fokin). 2. Insti-  
tut mashinovedeniya i avtomatiki (IMA) AN USSR (for Mizyuk, Zubov).
3. Osoboye konstruktorskoye byuro Ministerstva geologii i okhrany  
neдр SSSR (OKB MGION) (for Chir'yev, Petrov).  
(Prospecting--Electronic equipment)

L 24447-66 EWT(m)/ENP(w)/I/ENP(t) IJP(c) JD/WJ/JI/CS  
ACC NR: AT6010582 (N) SOURCE CODE: UR/0000/65/000/000/0161/0165

AUTHOR: Larikov, L. N.; Mirkin, I. L.; Zasinchuk, Ye. E.; Volkova, T. I.

ORG: Institute of Physics of Metals, AN UkrSSR (Institut metallofiziki AN UkrSSR);  
TsNIITMASH, State Planning Committee, SSSR (TsNIITMASH pri Gosplane SSSR)

TITLE: Investigation of the effect which charge purity and melting conditions have  
on the high-temperature strength and rate of growth of recrystallization centers in  
deformed nickel- and iron-based alloys

SOURCE: AN UkrSSR. Mekhanizm plasticheskoy deformatsii metallov. (Mechanism of the  
plastic deformation of metals). Kiev, Naukova dumka, 1965, 161-165

TOPIC TAGS: nickel base alloy, iron base alloy, refractory alloy, metal recrystal-  
lization, high temperature strength

ABSTRACT: The authors study the effect of purification (by melting in a vacuum and  
using charge materials refined by vacuum remelting) on the rate of growth of recryst-  
tallization centers and the refractory properties of multicomponent alloys. The  
specimens were complex austenite alloys based on iron (0.05% C, 15% Cr, 32% Ni, 6% W

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ACC NR: AT6010582

and 3% Mo) and nickel (0.05% C, 13% Cr, 6% Mo, 6% W, 6% Co) containing no titanium or aluminum, i.e. the quantity of excess hardening phases was at a minimum. The alloys were melted and teemed under various conditions: 1. in air from commercially pure metals (1N and 1Zh where N indicates a nickel-based alloy and Zh indicates an iron-based alloy); 2. in a deep vacuum ( $1 \cdot 10^{-4}$  mm Hg) from commercially pure metals (2N and 2Zh); 3. in a deep vacuum from metals previously remelted in a vacuum (3N and 3Zh). Specimens measuring  $5 \times 5 \times 10$  mm were cut from the ingots and annealed for 8 hours at  $1150^\circ\text{C}$  and then deformed to 80% by uniaxial compression at room temperature. The specimens were then subjected to recrystallization annealing with holding from 15 minutes to 8 hours at temperatures of  $650-800^\circ\text{C}$ . The temperature during annealing was held constant to within  $\pm 1^\circ$ . A surface layer of the order of tenths of a millimeter was removed by etching in aqua regia (nickel alloys) or in an alcohol solution of nitric acid (iron alloys). The rate of growth of the recrystallization centers was evaluated from the time necessary for reaching the first centers of a given size at a given temperature. It was found that the high-temperature strength of iron alloy is considerably increased by melting and teeming in a vacuum. Graphs are given showing the linear rate of growth in recrystallization centers as a function of temperature. These curves show that charge purity and melting conditions have a weak effect on the rate of growth of recrystallization centers

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ACC NR: AT6010582

throughout the entire range of temperatures and annealing times studied, although a tendency for acceleration of recrystallization processes was observed in more highly refined alloys. Empirical formulas are given for determining the rate of growth in recrystallization centers for nickel and iron alloys. Orig. art. has: 1 figure, 3 formulas. O

SUB CODE: 11/ SUBM DATE: 16Sep64/ ORIG REF: 006/ OTH REF: 005

Card 3/3dda

BULGAKOV, Yu.I.; VESHEV, A.V.; LARIONOV, L.V.

Bridge type instruments used in measuring magnetic susceptibility  
of rocks and ores. Uch. zap. LGU no.278:136-142 '59.

(MIRA 13:2)

(Magnetic instruments) (Rocks--Magnetic properties)

L 51381-65 EWP(1)/EEC(m)/EEC(k)-2/EWA(h) Po-l/Pq-l/Pg-l/Peb/Pi-l/Pl-l IJP(c)

ACCESSION NR: AP5010887

UR/0286/65/000/007/0067/0067

AUTHOR: Larionov, I. V.

TITLE: Induction detector of a constant magnetic field. Class 21, No. 169671

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 7, 1965, 67

TOPIC TAGS: magnetometer, magnetic field measurement gm

ABSTRACT: This Author Certificate presents an induction detector of a constant magnetic field containing a search coil. To measure small magnetic fields (less than one gauss), the detector has an electromagnet and an armature of ferromagnetic material. These excite torsional vibrations in the flexible shaft fastened at one end to the armature and at the other to the search coil (see Fig. 1 on the Enclosure). Orig. art. has: 1 diagram.

ASSOCIATION: none

SUBMITTED: 06Jan64

ENGL: 01

SUB CODE: ES, EM

NO REF SOV: 000

OTHER: 000

Card 1/2

L 51981-65

ACCESSION NR: AP5010987

ENCLOSURE: 01

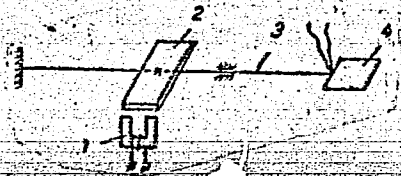


Fig. 1. Induction detector of a constant magnetic field  
1- electromagnet; 2- armature; 3- flexible shaft; 4-  
search coil

*hand*  
Card 2/2

VIKULOV, A.P.; YAMNITSKIY, E.I.; FOKIN, M.M.; LARIONOV, I.V.

Methods for testing the quality of ferrite ring cores. Zav. lab.  
31 no.4:459-460 '65. (MIRA 19:12)



DANILOV, V. [Danylov, V.], inzh.; LARIONOV, M., inzh.

Thermal treatment of air-entrained fly-ash concrete slabs in  
pit-type steam-curing chambers. Bud. mat. i konstr. 4 no.3:  
27-29 My-Je '62. (MIRA 15:5)  
(Lightweight concrete) (Autoclaves)

ZHUDOV, V., inzh.; SHUMAKOV, V., inzh.; LARIONOV, M., inzh.; GAVRILENKO,  
V. [Hapvrylenko, V.], inzh.

Thermal treatment of large heavy concrete products by heating  
without steam. Bud.mat.i konstr. 4 no.4:1-4 J1-Ag '62.  
(MIRA 15:8)

(Precast concrete)

SYTNIK, V., inzh.; POPOV, V., inzh.; LARIONOV, M., inzh.

Three-dimensional bathrooms of local materials. Zhil. stroi.  
no. 2:17-18 '64. (MIRA 18:11)

BUTOMA, B.Ye.; YEGOROV, M.Ye.; DEREVYANKO, Yu.G.; KHABAKHPASHEV, A.A.;  
BAKAYEV, V.G.; ISHKOV, A.A.; KOLESNICHENKO, N.S.; KAMENTSEV, V.M.;  
GORSHKOV, S.G.; KASATONOV, M.A.; ISHCHENKOV, N.V.; AFANAS'YEV, S.A.;  
TITOV, G.A.; LARICNOV, M.F.

Boris Evgen'evich Klopotov; obituary. Sudostroenie 30 (MIRA 18:3)  
no.11:81 '64.

GAVRILOV, Ye.G. (Moskva); LARIONOV, M.G. (Moskva)

Teacher's work on innovations and inventions. Fiz.v shkole 21  
no.4:110-111 JI-Ag '61. (MIRA 14:10)  
(Inventions) (Teaching--Aid and devices)

S/194/62/000/006/109/232  
D256/D308

AUTHORS: Borshchev, V.B., Kaminir, L.B., Larionov, M.G.,  
Litinskaya, L.L., Orlovskiy, G.N., Rokhlin, F.Z.,  
Urbakh, V.Yu., and Frank, G.M.

TITLE: Automatic analyzer of biological structures AB -1  
(AB-1)

PERIODICAL: Referativnyy zhurnal. Avtomatika i radioelektronika,  
no. 6, 1962, abstract 6-5-17 i (Biofizika, 1961, 6,  
no. 6, 745-747)

TEXT: Large number of measurements are required to obtain reliable information concerning the mean values of biological parameters. A description is given of AB-1 type automatic analyzer of biol. structures capable of producing the mean arithm. value of the area of 1024 micro-objects with an accuracy not less than  $\pm 7\%$  at a speed of operation of  $\sim 100$  micro-objects per second. The image of a micro-object is scanned by lines. The mean value of the area is obtained from the known spacing of the scans, the length of the chord of the object and the number of counted objects. The length of the Card 1/2

Automatic analyzer of biological ...

S/194/62/000/006/109/232  
D256/D308

chord is converted into a train of standard pulses; their number being proportional to the length. The number of counted objects is obtained by comparing the signals from the scanned line with the delayed signal from the preceding line: if the signal from the preceding line is the only one present, there being no signal from the scanned line, then it is understood that the scanning of the object is completed and a signal is sent to the counter. Nipkow-disk scanning with a simultaneous shifting of the apparatus was employed in the electro-optical converter. The flux of light which depends upon the brightness of the object, falls onto a photomultiplier tube, the output pulses being fed into the counter after amplification and shaping. Results of tests of the analyzer are presented, carried out with measurements of mean radius of erythrocytes. 8 references. [Abstracter's note: Complete translation.]

Card 2/2

ACC NR: AP7001327

SOURCE CODE: UR/0371/66/000/005/0015/0019

AUTHOR: Chernyak, V. G. — Cernaks, V.; Dunina, A. A. — Dunina, A.; Larionov, M. G. — Larionovs, M.; Plyavinya, I. K. — Plavina, I.; Shamovskiy, L. M. — Samovskis, L.; Tale, A. K. — Tale, A.

ORG: Physics Institute AN LatSSR (Institut fiziki AN Latv. SSR)

TITLE: Photoscintillations of KCl-Tl excited in the F-band

SOURCE: AN LatSSR. Izvestiya. Seriya fizicheskikh i tekhnicheskikh nauk, no. 5, 1966, 15-19

TOPIC TAGS: scintillation, light excitation, excitation spectrum, *f band*

ABSTRACT: An investigation was made of the rapid transfer of energy from F-centers to activator centers and of the time necessary for such transfer when the crystals are subjected to pulsed excitation. The investigation was based on the comparison of the kinetics of activator luminescence excited directly in the center of luminescence (Tl-scintillation) and in the F-absorption band (F-scintillation). KCl-Tl-F crystals (0.2 or 0.5 mol% Tl in melt) were irradiated with x- or gamma rays. The concentration of F-centers did not exceed  $5 \times 10^{17} \text{ cm}^{-3}$ . The crystals were placed in a metallic cryostat and excited with light pulses ( $\sim 10^{-7}$  sec) from a spark. The excitation was applied alternately in the 247 and 560 nm bands. A coincidence was found between F-scintillation and Tl-scintillation with regard to their time

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ACC NR: AP7001327

characteristics in the range from room temperature to the temperature of liquid nitrogen. The time characterizing the slow exponential decay  $\tau_{LC}$  (LC-long component) in F-scintillations changed from  $2.5 \times 10^{-7}$  sec to  $5 \times 10^{-5}$  sec with a change in temperature from 300 to 80K. At low temperatures, a sharp emission (short component-SC) of luminescence occurs which describes the form of the exciting spark pulse, as in the case of Tl-scintillation. The ratio of quantum yield of SC and LC of F-scintillation is the same as for Tl-scintillation in the entire range of measured temperatures, which shows that the overpopulation of the  $^3P_1$  level with respect to the  $^3P_0$  level at F-scintillation is the same as in the case of Tl-scintillation. The SC and LC of luminescence in F-scintillations relate to the activator luminescence of KCl-Tl, i.e., to the 305 nm band, but not to the 335 nm band, which corresponds to the hole centers. The maxima of the excitation spectra of F-scintillation and absorption spectra coincide and are in the region of  $560 \pm 5$  nm. From the experimental results, it follows that the mechanism of F-scintillation formation is of the electron type. This means that during short-time crystal excitation in the F-absorption band, free electrons, which are generated in the conductivity zone, recombine with holes, which are localized due to x- or gamma-irradiation on the activator ion or close to it. This process is accompanied by the excitation of the activator. Orig. art. has: 2 figures. [JA]

SUB CODE: 20/ SUBM DATE: 06Dec65/ ORIG REF: 007/ ATD PRESS: 5109

Card 2/2

YARRE, D.D., inzh., rukovoditel' brigady kommunisticheskogo truda;  
 APPROVED FOR RELEASE: 06/20/2000, CIA-RDP86-00513R000928710006-8"  
 MIRANOV, N.I., inzh., rukovoditel' brigady kommunisticheskogo  
 truda; LARIONOV, M.I., monter, udarnik kommunisticheskogo  
 truda; BARANOV, F.M., brigadir

Leading workers in the fields of wire broadcasting, district telephone communications, and television receiving networks exchange their experience. Vest. svyazi 21 no.9:19-23 S '61. (MIRA 14:9)

1. Moskovskaya gorodskaya radiotranslyatsionnaya set' (for Yarre).
  2. Teletel'ye No.1 g. Ufy (for Kharrasov).
  3. Smolenskiy radiouzel (for Larionov).
  4. Stroitel'no-montazhnoye upravleniye radiofikatsii Voronezhskoy direksii radio-translyatsionnykh setey (for Baranov).
- (Telecommunication--Employees)

ACC NR: AR6035540

SOURCE CODE: UR/0289/86/000/010/0046/0046

AUTHOR: Larionov, M. G.; Sholomitskiy, G. B.

TITLE: Observation of NGC 6523 occultation by the Moon on a 3.5-cm wavelength

SOURCE: Ref. zh. Astronomiya, Abs. 10.51.338

REF SOURCE: Astron. tsirkulyar, no. 358, marta 4, 1966, 1-5

TOPIC TAGS: Moon, radiometer, lunar occultation, NGC 6523

ABSTRACT: Radiometer characteristics are given and the method of observation of Moon transit near the galactic center on the 32.5 cm wavelength is described in detail. During the occultation of NGC 6523 by the Moon, a source of radio emission with a flux of  $(15 \pm 5) 10^{-26}$  w/Mc and angular dimensions of 30—40" was detected. The coordinates were determined by more than one way. The nature of the source and possibilities of identification are discussed. [Translation of abstract] [DW]

SUB CODE: 03/

Card 1/1

UDC: 523.164.4

ACCESSION NR: AT4025303

S/0000/63/000/000/0132/0144

AUTHOR: Larionov, M. M.

TITLE: Use of microwave radiometers for plasma research

SOURCE: Diagnostika plazmy\* (Plasma diagnostics); sb. statey. Moscow, Gosatomizdat, 1963, 132-144

TOPIC TAGS: microwave plasma, radiometer, plasma radiation, plasma temperature, noise temperature

ABSTRACT: Problems are considered connected with the construction of apparatus for the investigation of microwave radiation from a hot plasma, and radiometers constructed by the author of the direct amplification and of the superheterodyne type are described. The sensitivities of both types are compared and it is shown that both types have sufficient sensitivity for the investigation of hot plasma having a noise temperature  $10^5$  K and above. Both types of radiome-

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0

ACCESSION NR: AT4025303

ters were constructed and used to determine the electron temperature of a hot plasma in the "Alpha" apparatus. The superheterodyne radiometer was described earlier (paper CN-10/241, Conference on Plasma Physics Research in Salzburg, 4--9 September 1961). The direct amplification radiometer was constructed for detailed research on the radiation spectrum in the short-wave part of the band. Some considerations involved in the design of the amplifier are discussed briefly. The radiometer was used to record radiation from the plasma at 8 and 4 mm, at which its sensitivity was  $10^4$  K at a bandwidth of 10 kcs (compared with 2500K at a wavelength 8.2 mm and a filter bandwidth 50 kcs in the case of the superheterodyne radiometer). Orig. art. has: 10 figures and 5 formulas.

ASSOCIATION: None

SUBMITTED: 19Oct63

DATE ACQ: 16Apr64

ENCL: 02

SUB CODE: ME

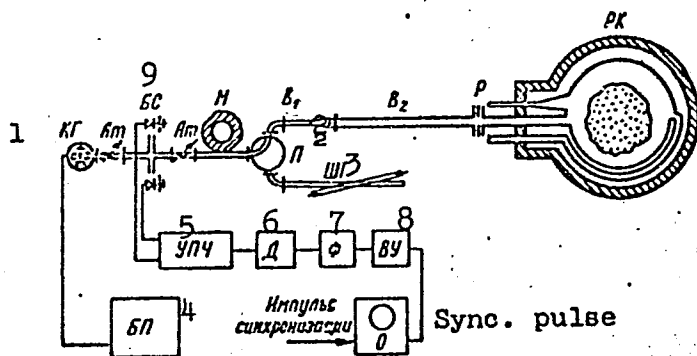
NR REF SOV: 001

OTHER: 007

Card 2/4

ACCESSION NR: AT4025303

ENCLOSURE: 01



- 1 - klystron generator
- 2 - waveguide switch
- 3 - noise generator
- 4 - power supply
- 5 - if amplifier
- 6 - detector
- 7 - filter
- 8 - video amplifier
- 9 - mixer
- M - modulator
- B<sub>1</sub>, B<sub>2</sub> - waveguides
- P - insulating disconnect
- PK - discharge chamber

Diagram of superhet. radiometer

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ACCESSION NR: AP4042946

S/0057/64/034/008/1533/1535

AUTHOR: Galaktionov, B.V.; Dolmatova, K.A.; Larionov, M.M.

TITLE: On the electron temperature and conductivity of the plasma in a high-current toroidal discharge

SOURCE: Zhurnal tekhnicheskoy fiziki, v.34, no.8, 1964, 1533-1535

TOPIC TAGS: plasma conductivity, electron temperature, hydrogen plasma

ABSTRACT: The authors have measured the conductivities and electron temperatures of hydrogen plasmas in the "Alpha" installation. The electron temperatures were determined from the probe characteristics of a three-grid electrostatic analyzer positioned with its axis parallel to the magnetic field. Observations were made with both of the two possible orientations of the probe with respect to the electron current. The thermal velocities of the electrons were found to be much greater than, their average velocity. The electron temperatures decreased with increasing hydrogen pressure from 40 eV at  $4 \times 10^{-4}$  mm Hg to 20 eV at  $16 \times 10^{-4}$  mm Hg. The electron temperatures were also determined from the microwave noise level in the 3 to 12 mm wavelength region with the assumption that this noise represents black body radia-

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ACCESSION NR: AP4042946

tion at the electron temperature. The results were in satisfactory agreement with the probe measurements, being from 10 to 30% lower. The conductivity of the plasma was determined experimentally from the current and the emf in the toroidal discharge tube, and it was calculated from the electron temperature by the  $T^{3/2}$  law. The measured conductivities were much less (by about a factor 20 at  $4 \times 10^{-4}$  mm Hg) than the calculated, and they increased with increasing pressure. A similar discrepancy has been found with the "Zeta" installation by W.M.Burton, E.R.Butt, H.C.Cole, A. Gibson, D.W.Mason, R.S.Pease, K.Whiteman and R.Wilson (Conference on Plasma Physics and Controlled Nuclear Synthesis, Report CN 10/60, Salzburg, 1961). The reason for this discrepancy is not known, but it is suggested that turbulent motion of the plasma, not taken into account in the derivation of the  $T^{3/2}$  law, may be involved. It is concluded that one cannot reliably determine electron temperatures from measurements of plasma conductivities. Orig.art.has: 1 formula and 2 figures.

ASSOCIATION: Fiziko-tekhnicheskii institut im.A.F.Ioffe AN SSSR, Leningrad (Physico-technical Institute, AN SSSR)

SUBMITTED: 17Oct63

SUB CODE: ME

NR REF SOV: 006

ENCL: 00

OTHER: 001

Cgd  
2/2

GALAKTIONOV, B.V.; DOLMATOVA, K.A.; LARIONOV, M.M.

Relationship between the ion and electron components of a plasma in  
the Alpha plant. Zhur. tekh. fiz. 34 no.9:1718-1720 S '64.

(MIRA 17:10)

1. Fiziko-tehnicheskii institut imeni Ioffe AN SSSR, Leningrad.



L 10736-65 EWT(1)/EWG(k)/EPA(sp)-2/EPA(w)-2/EEC(t)/T/EEC(b)-2/EWA(m)-2 Po-l/  
 PI-l/Pz-6/Pab-2h/Pb-l IJP(c)/ASD(p)-3/SSD/AFWL/ASD(a)-5/ESD(ga)/ESD(t)/ESD(c)/  
 AEDC(a)/AS(mp)-2/AFMD(t) AT S/0057/6A/034/010/1843/1851  
 ACCESSION NR: AP4048346

AUTHOR: Larionov, M.M.

TITLE: Investigation of the thermal radiation of a hot plasma in the three to twelve millimeter region

SOURCE: Zhurnal tekhnicheskoy fiziki, v.34, no.10, 1843-1951

TOPIC TAGS: plasma diagnostics, plasma temperature, measurement, electron temperature, electron density, plasma radiation, thermal radiation, microwave radiation

ABSTRACT: The thermal radiation of plasma in the "Alpha" installation was measured over the wavelength range from 3 to 12 mm. The receiving antenna was located within the metal wall of the discharge chamber; an auxiliary experiment showed that the radiation length within the chamber exceeded the linear dimensions by more than a factor 100. The author has described the receiver elsewhere (Sb. "Dagnostika plazmy" Edited by B.P.Konstantinova, Gosatomizdat, M.1963). The frequency range from 25 to 100 KMc was divided into 7 bands of width equal to about 20% of the mean frequency. The radiation temperature in each band was recorded on an oscilloscope with a precision of 2 eV. The relaxation time of the radiometer was 50 microsec, whereas

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L 10736-65  
ACCESSION NR: AP4046345

the duration of the discharge was 25 millisecc. The absorption of microwaves by the plasma was determined by auxiliary direct transmission measurements. The spectrum of the thermal radiation was found to vary with the hydrogen pressure in the discharge: as the pressure increased the low frequency radiation disappeared and the maximum intensity shifted toward higher frequencies. The spectrum also varied with the phase of the discharge, and it was possible to follow the decay of the plasma for approximately a millisecond after the discharge had ceased. The maximum radiation temperature of a plasma produced by discharge of a 4600 microfarad capacitor at 10 kV in a 360 Oe magnetic field varied between 20 and 80 eV. The observed features of the spectrum are interpreted, and it is concluded that the electron temperature and concentration in a plasma within a reflecting shell can be determined by examining the thermal radiation in the vicinity of the Langmuir frequency. The paper includes a brief review of the theory of the microwave thermal radiation of a plasma. "In conclusion, the author conveys his gratitude to V. Ye. Golant for his constant interest in the work, and to the group of co-workers at the "Alpha" installation for valuable assistance in conducting the measurements." Orig.art.has: 14 formulas, 7 figures and 1 table.

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L 10736-65

ACCESSION NR: AP4046345

ASSOCIATION: Fiziko-tekhnicheskly institut im.A.P.Ioffe AN SSSR, Leningrad (Physico-technical Institute, AN SSSR)

SUBMITTED: 13Dec63

SUB CODE: ME

NR REF SOV: 007

ENCL: 00

OTHER: 011

3/3

GALAKTIONOV, B.V.; LARIONOV, M.M.; PODUSHNIKOVA, K.A.

Anisotropy of the energy distribution of electrons in an alpha  
unit. Zhur. tekhn. fiz. 35 no.1:172-174 Ja '65. (MIRA 18:3)

L 12832-65 EWT(1)/EWG(x)/EWT(m)/EPA(sp)-2/EPA(w)-2/EEC(t)/T/EEC(b)-2/EWA(m)-2  
 Pz-6/Po-4/Pab-10/Pl-4 IJP(c)/BSD/AS(mp)-2/ASD(d)/AFWL/AEDC(b)/ASD(p)-3/ASD(a)-5/  
 ASD(f)-2/AFETR/SSD/ESD(gs)/ESD(t)/SSD(b) AI S/0057/84/034/009/1718/1720  
 ACCESSION NR: AP4045288

AUTHOR: Galaktionov, B.V.; Dolmatova, K.A.; ~~Larionov, N.M.~~

TITLE: On the ratio of the temperature of the ion and electron components of the plasma in the "alpha" installation <sup>B</sup>

SOURCE: Zhurnal tekhnicheskoy fiziki, v.34, no.8, 1964, 1718-1720

TOPIC TAGS: plasma, ion temperature, electron temperature, plasma oscillation/ Alpha installation

ABSTRACT: The present authors (ZhTF 34,1964;Sb."Diagnostika plazmy".Gosatomizdat, M.1963) have measured electron and ion temperatures in the plasma of the "alpha" installation with the aid of a multi-channel electrostatic analyzer. They confirm the earlier view that the ion temperature exceeds the electron temperature, but the ratio of the ion to the electron temperature was found to be considerably smaller than had been at first supposed, the ratio being, namely, between 1.5 and 2. The relaxation time for temperature equilibration by ion-electron collision is estimated to be  $10^{-5}$  sec, and it is found that a power of about 1 MeV/sec is required to maintain the observed temperature difference. Fluctuating electric fields with per-

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L 12832-65  
ACCESSION NR: AP4045288

5  
iods of the order of  $10^{-5}$  sec have been observed in discharges of the type discussed (W.M.Burton, E.P.Butt, H.C.Cole, A.Gibson, D.W.Mason, R.S.Pease, K.Whiteman and R.Wilson, Conference on research in the fields of plasma physics and controlled nuclear synthesis. Report G-10/60. Saltzburg, 1961), and it is concluded that the observed difference between the ion and electron temperatures can be explained by heating of the ions by these fluctuating fields and exchange of energy between ions and electrons through collisions. "In conclusion, the authors express their deep gratitude to V.Ye.Golant for his constant interest in the work and for discussing the results, and also to A.M.Timonin, K.A.Sorokin, V.P.Kovalenko and the whole group of coworkers of the "alpha" installation for assistance in organizing the measurements." Orig.art.has: 1 formula and 1 table.

ASSOCIATION: Fizkio-tekhnicheskiy institut im.A.P.Ioffe AN SSSR, Leningrad (Physico-technical Institute, AN SSSR)

SUBMITTED: 06Apr64

ENCL: 00

SUB CODE: ME

NR REF SOV: 007

OTHER: 001

2/2

GALAKTIONOV, B.V.; DOLMATOVA, K.A.; LARIONOV, M.M.

Electron temperature and conductivity of a plasma in a high-current toroidal discharge. Zhur. tekh. fiz. 34 no.8:1533-1535 (MIRA 17:9)  
Ag '64.

1. Fiziko-tekhnicheskiy institut imeni Ioffe AN SSSR, Leningrad.

LARIONOV, M.N.

Method of eliminating poor wettability in the measuring burettes  
of gas analyzers. Soob. Sakhal. kompl. nauch.-issl. inst. AN SSSR  
no.4:106-107 '56. (MIRA 11:5)  
(Burettes) (Wetting)



L 26971-65 EWT(1)/EPA(sp)-2/EWT(m)/T/EEG(t)/EPA(w)-2/EWA(m)-2 Pz-6/Po-4/  
Fab-10/Pi-4 IJP(c) AT

ACCESSION NR: AP5003260

S/0057/65/035/001/0172/0174

AUTHOR: Galaktionov, B.V. / Larionov, M.M. / Podushnikova, K.A.

64  
4  
B

TITLE: On the anisotropy of the electron energy distribution in the "alpha" installation

SOURCE: Zhurnal tekhnicheskoy fiziki, v.35, no.1, 1965, 172-174

TOPIC TAGS: plasma, plasma energy distribution, electron energy

ABSTRACT: The electron energy distribution in the plasma of the "alpha" installation was measured at the instant of maximum discharge current with a triple-grid probe. The probe was oriented so that its electrodes were perpendicular to the magnetic field at the instant of maximum current; by rotating the probe through 180° it was possible to determine separately the energy distribution of the electrons that were accelerated or retarded, respectively, by the circuital electric field. Although no anisotropy of the ion energy distribution had been detected in previous measurements, the electron energy distribution was found to be indeed anisotropic. The observed electron energy distribution could be represented by a displaced Maxwellian curve in which the energy of the directed motion was from 3 to 15% of the

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L 26971-65

ACCESSION NR: AP5003260

3

thermal energy. These results are similar to those obtained by A.Gibson and D.W. Mason (Proc.Phys.Soc.79,326,1962) for the "zeta" installation. The interpretation of the results is discussed very briefly, and it is suggested that reflection from field fluctuations prevents any considerable number of electrons from being continuously accelerated, so that the effect of the longitudinal electric field is merely to render the electron velocity distribution slightly anisotropic. "We are grateful to B.P.Konstantinov, V.Ye.Golant and D.G.Bulyginskiy for the interest they have shown in the work and for much valuable advice." Orig.art.has: 2 figures.

ASSOCIATION: none

SUBMITTED: 12Aug64

ENCL: 00

SUB CODE: ME

NR REF SOV: 004

OTHER: 002

Card 2/2

LARIONOV, M.N.

Semicoking of low-rank Sakhalin coal with a solid heat-transfer  
medium. Soob.Sakhal.kompl.nauch.--issl.inst.AN SSSR no.8:3-22 '59.  
(MIRA 14:4)

(Sakhalin--Coke)

LARIONOV, M.N.

Use of the oscillographic method in investigating thermal  
decomposition of coal during high-speed heating. *Izv.Sib.otd.*  
AN SSSR no.8:44-49 '61. (MIRA 14:8)

1. Sakhalinskiy kompleksnyy nauchno-issledovatel'skiy institut  
Sibirskogo otdeleniya AN SSSR.  
(Coal gasification)

KOVALEVA, A.F.; KOROLEV, S.A.; KOCHETOVSKAYA, T.N.; LARTONOV, M.P.;  
MARTYHENKO, L.M.; SAVEL'YEV, Ye. A.; KOZLOV, G.A., otv.  
red.; SOSKIN, A.M., red.

[Album of visual aids on economics; the section "Socialism."]  
Al'bom nagliadnykh posobii po politicheskoi ekonomii; razdel  
"Sotsializm." Leningrad, Gospolitizdat, 1960. 40 plates  
(MIRA 15:11)

(Economics---Audio-visual aids)

LARIONOV, N.

Stockbreeders' competition. Sov. profsoiuzy 3 no.6:49-51 Je '55.  
(MIRA 8:8)

1. Sekretar' Omskogo oblastnogo soveta profsoyuzov.  
(Stock and stockbreeding)

LARIONOV, N. (g.Omsk)

Generalizing advanced experience. NTO no.6:53-54 Je '59.  
(MIRA 12:9)

1. Predsedatel' Omskogo oblastnogo soveta nauchno-tehnicheskikh  
obshchestv.  
(Omsk--Research, Industrial)

LARIONOV, N.

On a public basis. NTO 3 no.4:42 Ap '61. (MIRA 14:3)

1. Predsedatel' Omskogo oblastnogo soveta Nauchno-tekhnicheskikh  
obshchestv.

(Omsk Province—Technological innovations)



LARIONOV, N.A., gornyy inzh.

"KKG-8" excavator. Nauka i zhizhn' 27 no.2:67 F '60.  
(MIRA 13:6)

(Strip mining) (Excavating machinery)

LARIONOV, N.A., gornyy inzh.

Potentialities for improving the performance of EKG-8 excavators.  
Gor. zhur. no. 11:36-38 N '60. (MIRA 13:10)

1. Tsentral'nyy nauchno-issledovatel'skiy gorno-razvedochnyy  
institut, Moskva. (Excavating machinery)

LARIONOV, N.A., gornyy inzh.

Relation between the quality of rock scarifying and the efficiency of excavators. Gor. zhur. no. 12:53-54 D '61.  
(MIRA 15:2)

1. Tsentral'nyy nauchno-issledovatel'skiy gornorazvedochnyy institut, Moskva.  
(Excavating machinery)

LARIONOV, N. A., gornyy inzhener

Increasing the productivity of excavators. Gor. zhur. no. 11:  
15-17 N '62. (MIRA 15:10)

1. Tsentral'nyy nauchno-issledovatel'skiy gornorazvedochnyy  
institut, Moskva.

(Excavating machinery)