

LIDIN, G.D., prof., doktor tekhn. nauk, red.; AYRUNI, A.A., kand.  
tekhn. nauk, otv. red.; VINOGRADOVA, G.V., red. izd-va;  
IL'INSKAYA, G.M., tekhn. red.

[Problems in the theory of degassing coal seams] Voprosy  
teorii degazatsii ugol'nykh plastov; trudy. Pod obshchei  
red. G.D.Lidina. Moskva, Gosgortekhzdat, 1963. 205 p.  
(MIRA 16:4)

1. Vsesoyuznoye nauchno-tekhnicheskoye soveshchaniye po  
teorii degazatsii, Moscow, 1961. 2. Institut gornogo dela  
im. A.A.Skochinskogo (for Ayruni).  
(Mine gases)

LIDIN, Georgiy Dmitriyevich, st. nauchn. sotr., doktor tekhn. nauk prof.; AYRUNI, Arsen Tigranovich, st. nauchn. sotr., kand. tekhn. nauk; SKOCHINSKIY, A.A., akademik, otv. red. [deceased]; PARTSEVSKIY, V.N., red.iid-va; MAKUNI, Ye.V., tekhn. red.; RYLINA, Yu.V., tekhn. red.

[Gas abundance in coal mines of the U.S.S.R.] Gazoobil'-nost' kamennougol'nykh shakht SSSR. Otv. red. A.A.Skochinskii. Moskva, Izd-vo AN SSSR. Vol.3. [Gas abundance in coal mines of the Central Donets Basin region] (gazoobil'nost' kamennougol'nykh shakht tsentral'nogo raiona Donetskogo basseina. 1963. 350 p. (MIRA 17:4)

1. Moscow. Institut gornogo dela imeni A.A.Skochinskogo

OSIPOV, Sergey Nikolayevich; AYRUNI, A.T., otv. red.

[Methane liberation during the working of flat seams]  
Metanovydelenie pri razrabotke pologikh ugol'nykh pla-  
stov. Moskva, Nedra, 1964. 254 p. (MIRA 18:2)

KEARIEV, Aleksey Akimovich; VORONINA, L.D., kand. tekhn.nauk retsenzent;  
SUKHACHEV, A.P., gorn. inzh., retsenzent; AYRUNI, A.T., kand.  
tekhn. nauk, nauchn. red.

[Mine ventilation, lighting and safety] Rudnichnaia ventilia-  
tsiia, osveshchenie i gornospasatel'noe delo. Moskva, Nedra,  
1965. 287 p. (MIRA 18:3)

KLEBANOV, F.S., kand. tekhn. nauk; AYRUMI, A.T., kand. tekhn. nauk

Dependence of the methane abundance of a section on the quantity  
of air supply. Ugol' 38 no.1:39-43 Ja '63. (MJRA 18:3)

1. Institut gornogo dela im. A.A. Shchinskogo.

MIKHITARYAN, Kh.T., AYRYAN, A.P.

Candidomycosis of the bladder. Urologia 23 no.4:60-61 J1-Ag '58  
(MIRA 11:8)

1. Iz kliniki fakul'tetskoy khirurgii (zav. - prof. R.L. Paronyan)  
Yerevanskogo meditsinskogo instituta.

(BLADDER, dis.

moniliasis after antibiotic ther. (Rus))

(MONILIASIS, etiol. & pathogen.

antibiotic ther. causing bladder moniliasis (Rus))

(ANTIBIOTICS, inj.eff.

moniliasis of bladder (Rus))

AYSANOV, Ya.B.; MANSUROV, R.I.

Clastic dikes in the central Kyzyl Kum. Trudy Uz. geol. upr.  
no.2:94-95 '62. (MIRA 16:8)  
(Kyzyl Kum. Dikes (Geology))

8/028/63/000/001/045/120  
A062/A101

AUTHOR: Aysberg, R. M.

TITLE: Direct interactions due to nucleons

PERIODICAL: Referativnyy zhurnal, Fizika, no. 1, 1963, 17, abstract 1V115  
(In collection: "Stroyeniye yadra". Moscow. Gosatomizdat, 1962,  
121 - 126, Discuss., 127 - 128)

TEXT: The role of two-particle and collective interactions in direct nuclear processes is discussed. On the basis of an analysis of experimental data, the author concludes that in all reactions engendered by nucleons, the mechanism of direct processes is connected with two-particle interactions. Direct processes, bringing about the excitation of lower states of the residual nucleus, bear a collective character, related to the excitation of collective degrees of freedom of the nucleus. In this case the effect of the sum of two-particle interactions may be considered as a collective interaction. ✓

[Abstracter's note: Complete translation]

A. Sitenko

Card 1/1



*Aysel, A.A.*

AYSELI, A.A. [deceased]

Experimental tularemia in the Norway rat. Izv. Irk.gos.protivochum.  
inst. 9:5-26 '51. (MIRA 10:12)

1. Moskovskaya nablyudatel'naya protivochumnaya stantsiya Minister-  
stva zdravookhraneniya SSSR.  
(TULAREMIA)

AYSEN, E. A., KLEINBOCK, Ya. I., PETROV, V. M., HAYTURINA, Q. Sh. and PODLINOV, I. S.

"Bronchial ~~re~~ pneumonia in lambs."

Veterinariya, Vol. 37, No. 8, 1960, p. 51

*Sci. Collaborator - Vet. Inst., Kazakh Acad. Agric. Sci -*

KLEYNBOK, Ya.I.; PETROV, V.M., kand.veterinarnykh nauk; BAYTURJINA, O.Sh.  
kand.veterinarnykh nauk; PODLINOV, M.S., nauchnyy sotrudnik;  
AYSEN, Ye.A., nauchnyy sotrudnik

Bronchopneumonia rate in lambs. Veterinariia 37 no.8:51-55  
Ag '60. (MIRA 15:4)

1. Institut veterinarii Kazakhskoy akademii sel'skokhozyaystvennykh  
nauk. 2. Chlen-korrespondent AN KazSSR (for Kleynbok).  
(Kazakhstan--Lambs---Diseases and pests) (Pneumonia)

AYSEN, Ye.A., nauchnyy sotrudnik

Intensity of immunity in dogs immunized with homologous  
and heterogenous vaccines against rabies. Veterinariia 41  
no.1:17-19 Ja '64. (MIRA 17:3)

1. Kazakhskiy nauchno-issledovatel'skiy veterinarnyy institut.

S/117/61/000/001/010/013  
A001/A001

AUTHORS: Aysenberg, L. I., Gartsoskiy, A. A.

TITLE: 4 Minutes Instead of 90

PERIODICAL: Mashinostroitel', 1961, No. 1, p. 23

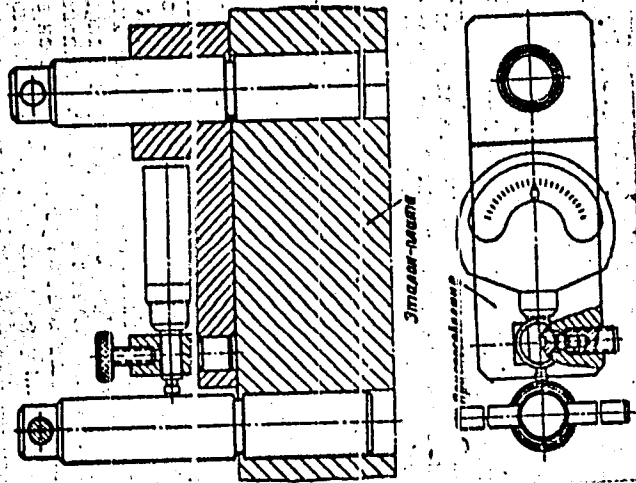
TEXT: The illustration shows a new device for the checking of coordinates of plate holes. The device has a finished hole into which a mandrel is fitted. The measuring head of the device, having a graduation of 0.001 mm, touches a second mandrel. With the aid of the mandrels, the device is set on the required dimensions according to a gage plate. Then the device is placed on the plate being checked, the mandrels are put in the holes of this plate and the distance between the mandrels is measured. The deviation of the interaxial distance being measured from the gage measure can be read on the scale of the device. The mandrels are stepped, the diameters of their upper parts are identical, with an accuracy of up to  $1\mu$ . The diameters of their lower parts correspond to the rated dimension of the hole being measured and are made with an interval of  $2\mu$ , which makes it possible to select mandrels without clearance for each hole of the plate being checked. This measuring method has been checked by comparing its

Card 1/2

S/117/61/000/001/010/013  
A004/A001

4 Minutes Instead of 90

results with those obtained on the optical W3M10 (IZM10) measuring machine. The measuring time of interaxial distances of plates amounts now to 4 instead of 90 minutes required by the former checking method. There is 1 figure.



Card 2/2

AYSHELES, I. I.

Аишелос

ОБЪЕДИНЕНИЕ СТАЛИ И СПЛАВОВ

М. А. Шимков П. В. Голуб Ф. А. Саварина	Некоторые особенности процесса раскиснения ферросплавов.
Р. А. Раби П. В. Голуб	Влияние углерода на водородоустойчивость стали.
Г. И. Оборин А. Ю. Пыжов А. М. Самарин	Особенности раскиснения стали при дуговой вакуумной переработке.
А. М. Самарин М. П. Кузнецов Д. П. Удальцов Л. М. Леонов А. И. Луговой	Повышение скорости дескиснераскисления металлов вакуумной обработкой в азоте.
Г. М. Оган И. И. Алешин Г. А. Саварина В. И. Демин В. В. Козлов	Новые технологии производства и переработки сталей с применением азота.
П. В. Афан В. Г. Чернов	Влияние азотсодержащих соединений на свойства сталей при плавлении в вакууме.
И. В. Поном Э. И. Саварина	Влияние технологических факторов вакуумной дуговой плавки на содержание азота в легированных сталях в инертной атмосфере.
Т. М. Виногра И. П. Зыбин В. С. Катков	Влияние вакуумной обработки на свойства сталей при плавлении в азоте на качество сталей ДВНГСА.

report submitted for the 5th Physical Chemical Conference on Steel Production, Moscow-- 30 Jun 1959.

Alisa, A. I. (rř. Kryukovo)

Development of interest for mathematics in the students of  
schools for working youth. Mat. v shkole no.5:9-12 3-2 '61.  
(IRA 14:10)

(Mathematics--Study and teaching)



AYSINOV, M. M.

"The Analysis of a Feedback Amplifier," Radio Tekh, July, 1954

ACC NR: AP6021456

SOURCE CODE: UR/0413/65/000/011/0079/0079

INVENTOR: Ruzoport, M. B.; Saliverstov, B. P.; Chervonskiy, M. I.; Gurevich, B. L.;  
Malinskiy, S. A.; Veksler, B. Ye.; Aysman, Yu. A.; Remennikov, V. B.; Zhavoronkov,  
G. A.

ORG: None

TITLE: A device for automatically analyzing seismograms and constructing seismic  
profiles. Class 42, No. 182349

SOURCE: Izobreteniya, promyshlennyye obratzy, tvornyye znaki, no. 11, 1966, 79

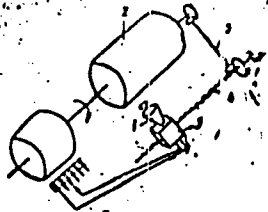
TOPIC TAGS: seismography, cathode ray tube, seismic modeling

ABSTRACT: This Author's Certificate introduces: 1. A device for automatically ana-  
lyzing seismograms and constructing seismic profiles. The unit is based on Author's  
Certificate No. 166503. Efficiency of analysis is improved by mounting a cathode ray  
tube on a carriage which is moved along a photodrum by a worm gear or ratchet turned  
by the shaft of the photodrum. 2. A modification of this device in which measurement  
quality is improved by connecting a sawtooth generator through a programmed amplitude  
regulator to the vertical deflection system of the cathode ray tube.

Card 1/2

UDC: 550.340.84

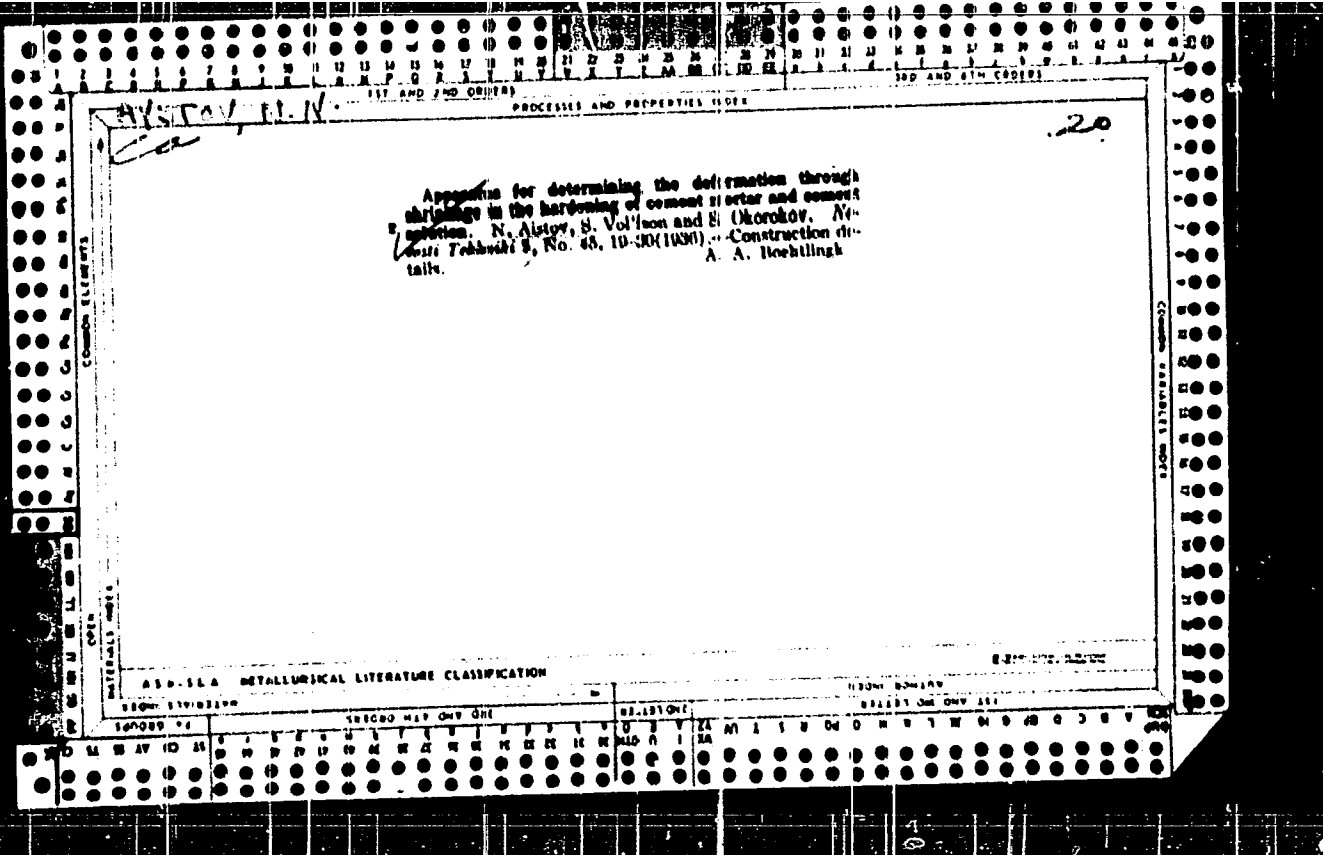
ACC NR: AP6021455



1--cathode ray tube; 2--  
photodrum; 3--carriage;  
4--worm shaft; 5--drive

SUB CODE: 08, 09/ SUBM DATE: 31Mar64

Card 2/2



AYSTOV, N. N.

17

Reconstruction of Old Types of Amaker Testing Machines.  
 N. N. Aystov. (Zavodskaya Laboratoriya, 1949, vol. 18,  
 Sept., pp. 1139-1140). [In Russian]. A device is described  
 for improving the control of the counter-weight in the older  
 types of vertical Amaker testing machines.—S. K.

ASB-55A METALLURGICAL LITERATURE CLASSIFICATION

OPEN COMMON (LIT) MATERIALS NOTE

PROCESSES AND PROPERTIES INDEX

1ST AND 2ND ORDERS

3RD AND 4TH ORDERS

GROUP NOMENCLATURE

ALPHABETIC INDEX

1	2	3	4	5	6	7	8	9	0	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

*AYSTOV, N.N.*

LASHCHENKO, N.N., dotsent, kandidat tekhnicheskikh nauk; SLAVIN, M.Ya.,  
kandidat tekhnicheskikh nauk, dotsent, otvetstvennyy redaktor;  
AYSTOV, N.N., doktor tekhnicheskikh nauk, professor, retsentsent;  
EMDA, P.K., inzhener, retsentsent; KAPLAN, M.Ya., redaktor;  
PUL'KINA, Ye.A., tekhnicheskiy redaktor

[Reinforcing metal structural elements] Usilenie metallicheskih  
konstruktsii. Leningrad, Gos. izd-vo lit-ry po stroitel'stvu i  
arkhitekture, 1954. 154 p. (MLRA 7:10)  
(Building, Iron and steel)

АЙСТОВ, С.

PA 22T17

U.S.S.R./Aeronautics  
Flight Training  
Airplanes, Fighter

Aug 1947

"Preflight Training and Fighter Piloting," S. Aistov,  
5 pp

"Vestnik: Vozdushnogo Flota" No 8 (342)

This article attempts to describe Soviet preflight training and the day when the fledgling pilots solo. The fighter pilot must be a master gunner and aerial tactician for day or night operations. Emphasis is put on the constant observation of the future pilot during his training period.

22T17

AISTOVA, R. I.

V1226

STUDY OF ISOTOPIC EXCHANGE OF OXYGEN BETWEEN  
HEAVY OXYGEN WATER AND CERTAIN TUNGSTATES. 62  
V. I. Spiliya, R. I. Aistova, and V. N. Vasil'ev. (Inst. of  
Physical Chemistry). Doklady Akad. Nauk S.S.S.R. 104,  
741-3(1958) Oct. 11. (In Russian)

Water- $O^{18}$  was used in the investigation of the sodium  
paratungstate  $Na_{10}W_{12}O_{41} \cdot 28H_2O$  structure. The results  
proved that in normal tungstate and in sodium paratungstate  
all the oxygen atoms are accessible for isotopic exchange of  
oxygen with water as solvent. During the exchange, the  
enrichment of paratungstate anion by heavy oxygen isotopes  
was observed, while in the normal tungstate ion no such  
phenomena occurred. This indicates that the fractionation  
of oxygen isotopes depends not only on the mass of the  
hydrated elementary ions, but also, on the complex ion mass  
present in the solvent. (R.V.J.)



AYSTOVA, R. I.

**AUTHORS:** Spitsyn, Vikt. I., Corresponding Member of the AN USSR, 20-1-30/58  
Lupitskiy, A. V., Aistova, R. I., Nishanov, E., Pchelkin, V. A.

**TITLE:** Studies of the:  
Isotopic Exchange of Oxygen Between Heavy-Oxygen Water and Some Niobates and Tantalates (Izucheniye izotopnogo obmena kisloroda mezhdutrazhelokislorodnoy vodoy i nekotorymi niobatami i tantalatami).

**PERIODICAL:** Doklady AN SSSR, 1958, Vol. 118, Nr 1, pp. 107-109 (USSR).

**ABSTRACT:** Individual authors (references 1-8) ascribe different structures to the niobates and tantalates. In several cases the part played by the water and the position of the water are not taken into account. All pertinent papers except references 9, 10 deal with the character of the binding between the central atom and the oxygen atoms. In the paper by Spitsyn, Aistova and Vasil'yev (reference 12) the method of isotope exchange which was also employed by the authors in the present paper was employed in the investigation of another binding. In the tests they used water enriched with  $O^{18}$  (1.28 atom-%  $O^{18}$ ). The exchange was carried out at 95°C in saturated solutions of these salts: sodium-penta- and -hexa-tantalate, as well as potassium-hexa- and -meta-niobate. The duration of test was 5 hours. By hydrolysis the solutions had an alkaline reaction (pH = 11-12). The method was described in the above-mentioned paper (reference 12). Table 1 records

Card 1/3

Studies of the:

Isotopic Exchange of Oxygen Between Heavy-Oxygen Water and Some Niobates and Tantalates. 20-1-30/58

the test results together with the calculated values of the  $O^{18}$ -content in the solvent after the completed exchange. From this may be seen that not only the oxygen of the water bound in the tantalates enters into the isotopic exchange, but also the entire oxygen from their anions. Further all experimental values of  $O$ -content in water were much smaller than the calculated ones. These deviations lie outside the experimental error. These results may be explained by the fractionation of the oxygen-isotope which proceeds in the direction of the enrichment of the salt with heavy isotope (references 12,14). As follows from table 2, a complete exchange of oxygen from the water, as solvent, and from the anions of these salts also takes place in the case of potassium-hexy- and -meta-niobate. But no enrichment of the salt with heavy oxygen-isotope takes place here. This difference is apparently brought about due to a higher molecular weight of the niobates as compared with the tantalates. As regards the tantalates investigated, in this respect they approach the aquo-poly-tungstates. Thus all oxygen atoms of the above-mentioned 4 salts and combined water are accessible to the isotopic exchange with water as a solvent. The equilibrium is comparatively early attained (within 5 hours).

Card 2/3

There are 2 tables, and 14 references, 7 of which are Slavic.

Studies of the:

20-1-30/58

Isotopic Exchange of Oxygen Between Heavy-Oxygen Water and Some Niobates and Tantalates.

ASSOCIATION: Institute for Physical Chemistry AN USSR (Institut fizicheskoy khimii Akademii nauk SSSR).

Moscow State University imeni M. V. Lomonosov (Moskovskiy gosudarstvennyy universitet imeni M. V. Lomonosova).

SUBMITTED: July 25, 1957.

AVAILABLE: Library of Congress.

Card 3/3

AYTAKOV, E.N., ordinator

Clinical observations on potentiated anesthesia. Med. zhur. Uzb.  
no. 1:12-15 Ja '60. (MIRA 1318)

1. Iz kliniki gospital'noy khirurgii lechebnogo fakul'teta (zav.-  
prof. S.A. Masumov) Tashkentskogo gosudarstvennogo meditsinskogo  
instituta.

(ANESTHESIA)

ZIMON, I.N.; AYTAKOV, E.N.

Cancer of the duodenum. Med.zhur.Uzb. no.8:75-77 Ag '62.  
(MIRA 16:4)

1. Iz khirurgicheskogo otdeleniya (nav. - prof. S.A.Masumov)  
Klinicheskoy bol'nitsy neotlozhnoy pomoshchi Tashkentskogo  
gorod'skogo otdela zdravookhraneniya.  
(DUODENUM-CANCER)

YERZHANOV, Zh.S.; AYTALIYEV, Sh.M.

Stresses in a pressurized composite ring reinforcing a circular opening. Izv. AN Kazakh. SSR. Ser. mat. i mekh. no.10:46-50  
'62. (MIRA 15:9)

(Strains and stresses) (Elasticity)

AYTALIYEV, Sh.M.; YERZHANOV, Zh.S. (Alma-Ata)

"The state of stress of headless and pressure hydrotechnical tunnels  
under conditions of creep of rocks"

report presented at the 2nd All-Union Congress on Theoretical and Applied  
Mechanics, Moscow, 29 January - 5 February 1964

AYTALIVEY, Z. A.

Some data on the chemistry of the  
 tal region. Z. A. Aitaley, Tyasy. This is  
 a. Isledeniye. In 1950-51 (1950). This is  
 on the basis of 2 geol. regions: Mt. Altai and  
 in eastern Kazakhstan. A. contains the  
 can not be said to be unique as in all respec  
 there in chem. comp. of the rocks is su  
 Both regions are subject of rare mineral  
 Mt. Altai there is probably no passing  
 diluted in Kalba and Naryn. The  
 and Naryn. The  
 in Kalba-Naryn, N.  
 components of Mt. Altai's or de

the Mt.  
 no-Mt.  
 detailed  
 Kalba-  
 these 2  
 The  
 unaltered.  
 ample, at  
 is widely  
 set hand,  
 ne of the  
 H. Q.

EE



BORUKAYEV, R.A., akad.; BORSUK, B.I.; KELLER, B.M.; AYDALIYEV, Zh.A.;  
BOGDANOV, A.A.; BUBLICHENKO, N.L.; BYKOVA, M.S.; GALITSKIY, V.V.;  
MEDOFEV, G.Ts.; MYAGKOV, V.M.; ORLOV, I.V., NUKAVISHNIKOVA, T.B.;  
SHLYJIN, Ye.D.; NIKITIN, I.F., uchenyy sekretar'; SERKEVICH, M.A.,  
uchenyy sekretar'.

[Resolutions of the Conference on the Unification of Stratigraphic  
Charts of the Pre-Paleozoic and Paleozoic of Eastern Kazakhstan]  
Rezoliutsiia po unifikatsii stratigraficheskikh skhem dopaleozoya  
i paleozoya vostochnogo Kazakhstanu. Alma-Ata, Izd-vo Akad. nauk  
Kazakhskoi SSR, 1958. 36 p. (MIRA 11:12)

1. Soveshchaniye po unifikatsii stratigraficheskikh skhem dopaleozoya vostochnogo Kazakhstanu. Alma-Ata, 1958. 2 Akademiya nauk Kazakhskoy SSR, predsedatel' soveshchaniya po unifikatsii stratigraficheskikh skhem dopaleozoya i paleozoya vostochnogo Kazakhstanu (for Borukayev).
3. Zam.predsdatelya soveshchaniya po unifikatsii stratigraficheskikh skhem dopaleozoya i paleozoya vostochnogo Kazakhstanu; Vsesoyuznyy nauchno-issledovatel'skiy geologicheskii institut (for Boruk).
4. Zam.predsdatelya soveshchaniya po unifikatsii stratigraficheskikh skhem dopaleozoya i paleozoya vostochnogo Kazakhstanu; Geologicheskii institut Akademii nauk SSSR (for Keller).
5. Ministerstvo geologii i okhrany nedr Kazakhskoy SSR (for Aydaliev, Myagkov).
6. Moskovskiy gosudarstvennyy universitet im. M.V. (Continued on next card)

HOBUKAYEV, R.A.---(continued) Card 2.

Lomonosova (for Bogdanov). 7. Altaynkiy gorno-metallurgicheskiy nauchno-issledovatel'skiy institut Akademii nauk Kazakhskoy SSR (for Bublichenko). 8. Institut geologicheskikh nauk Akademii nauk Kazakhskoy SSR (for Bykova, Galitskiy, Medoyev, Shlygin, Nikitin). 9. Tsentral'no-Kazakhstanskoye geologicheskoye upravleniye (for Orlov). 10. Yuzhno-Kazakhstanskoye geologicheskoye upravleniye (for Rukavishnikova, Senkevich).  
(Kazakhstan--Geology, Stratigraphic)

AVROY, P.Ya.; AYTELIN, Zh. A.; AUBZOV, M.G.; AKHMEDSAFIN, U.M.; BATISHCHEV-  
TARASOV, S.D.; BAZENOVA, N.U.; BAISHEV, S.B.; BAYKONUROV, A.B.;  
BEKTUROV, A.B.; BOGATYREV, A.S.; BOK, I.I.; BORUKAYEV, R.A.; BUTLICHENKO,  
N.L.; BYKOVA, M.S.; ZHILINSKIY, G.R.; ZYKOV, D.A.; IVANKIN, P.F.;  
KAZANLI, D.N.; KAYUROV, A.K.; KENESBAYEV, S.K.; KOLOTILIN, N.F.;  
KUNAYEV, D.A.; KUSHEV, G.L.; LAY, S. V.; MASHANOV, O.Zh.; MEDOYEV,  
G.TS.; MONICH, V.K.; MUKANOV, S.; MUSREPOV, G.; MUKHAMEDZHANOV, S.M.;  
PARSHIN, A.V.; POFROVSKIY, S.N.; POLOSUKHIN, A.P.; RUSAKOV, M.P.;  
SERGIYEV, N.G.; SHYFULIN, S.Sh.; TAZHIBAYEV, P.G.; FESENKOV, V.G.;  
SHLYGIN, Ye.D.; SHCHERBA, G.N.; CHOLIN, Sh.Ch.; CHOLPANKULOV, T.Ch.

Sixtieth birthday of Academician Karysh Imantayevich Satpaev. Vest.  
AN Kazakh, SSR 15 no.4:58-61 Ap 19. (MIRA 12:7)  
(Satpaev, Karysh Imantayevich, 1899-)

BORUKAYEV, R.A., *otv.red.*; AYTALIYEV, Zh.A., *red.*; BUBLICHENKO, N.L., *red.*;  
BYKOVA, M.S., *red.*; GALITSKIY, V.V., *red.*; MEDOISEV, G.TS., *red.*;  
NIKITIN, I.F., *red.*; RUKHISHNIKOVA, T.B., *red.*; SENKOVICH, M.A.,  
*red.*; SHELGIN, Ye.D., *red.*; SEMENOV, M.N., *red.*; PROKHOROV, V.P.,  
*tekhn.red.*

[Transactions of the Conference on the Unification of Stratigraphic  
Scales of the Pre-Paleozoic and Paleozoic in Eastern Kazakhstan.  
Alma-Ata, 1958] Trudy Soveshchaniya po unifikatsii stratigraficheskikh  
skhem dopaleozoya i paleozoya Vostochnogo Kazakhstana. Alma-Ata,  
Izd-vo Akad.nauk Kazakhskoi SSR. Vol.2. [Devonian, Carboniferous,  
Permian] Devon, karbon, perm'. 1960. 253 p. (MIRA 13:8)

1. Soveshchaniye po unifikatsii stratigraficheskikh skhem dopaleozoya  
i paleozoya Vostochnogo Kazakhstana. Alma-Ata, 1958. 2. Altayskiy  
gornometallurgicheskii nauchno-issledovatel'skiy institut AN KazSSR  
(for Bublichenko). 3. Institut geologicheskikh nauk AN KazSSR (for  
Bykova). 4. Yuzhno-Kazakhstanskoye geologicheskoye upravleniye (for  
Senkovich).

(Kazakhstan--Geology, Stratigraphic)

BORUKAYEV, R.A., akademik, otv.red.; AYTALN'YEV, Zh.A., red.; BUBLICHENKO, N.L., red.; BYKOVA, M.S., red.; GALITSKIY, V.V., red.; IVSHIN, N.K., red.; MEDOYEV, G.TS., red.; NIKITIN, I.F., red.; RUKAVISHNIKOVA, T.B., red.; SENKEVICH, M.A., red.; SHLYGIN, Ye.D., red.; SEMENOV, M.N., red.; PROKHOROV, V.F., tekhn.red.

[Transactions of the conference on the unification of stratigraphic diagrams of the Pre-Paleozoic and Paleozoic in eastern Kazakhstan, Alma-Ata, May 12-17, 1958.] Trudy Soveshchaniya po unifikatsii stratigraficheskikh skhem dopaleozoya i paleozoya Vostochnogo Kazakhstana. Alma-Ata. Izd-vo Akad.nauk Kazakhskoi SSR. Vol.1. [Pre-Paleozoic, Cambrian, Ordovician, Silurian] Dopaleozoi, kembrii, ordovik, silur. 1960. 296 p. (MIRA 13:6)

1. Soveshchaniye po unifikatsii stratigraficheskikh skhem dopaleozoya i paleozoya Vostochnogo Kazakhstana. Alma-Ata, 1958. 2. Predsedatel' Orgkomiteta stratigraficheskogo soveshchaniya; AN KazSSR; Institut geologicheskikh nauk AN KazSSR (for Borukayev). 3. Institut geologicheskikh nauk AN KazSSH (for Nikitin). 4. Yuzhno-Kazakhstanskoye geologicheskoye upravleniye (for Rukavishnikova). (Kazakhstan--Geology, Stratigraphic)

SHCHERBA, Grigoriy Nikiforovich; AYTALIYEV, Zh.A., otv.red.;  
RZHONDKOVSKAYA, L.S., red.; ALFEROVA, P.F., tekhn.red.

[Formation of rare metal deposits in central Kazakhstan]  
Fermirovanie redkometal'nykh mestorozhdenii TSentral'nogo  
Kazakhstana. Alma-Ata, Izd-vo Akad.nauk Kazakhskoi SSR,  
1960. 378 p. (MIRA 14:1)

1. Chlen-korrespondent AN KazSSR (for Aytaliyev).  
(Kazakhstan--Metals, Rare and minor)

AYTALIYEV, Z. A.; SHCHERVA, G. N.

Rare metals in Kazakhstan. Izv. AN Kaz. SSR. Ser. geol. no. 4:75-83  
'60. (MIRA 14:2)

(Kazakhstan--Metals, Rare and minor)

AYTMASHEV, G.A.; ISAKOV, V.A.; NOGAY, Yu.T.; KHARTOVICH, Yu.I.

Ways of Improving the mining of valuable ore deposits with unstable  
enclosing rock. Trudy Inst.gor.dela AN Kazakh.SSR 14:18-27 '64.  
(MIRA 18:1)



AYTASHEV, G.I.

Order of mining crossing veins. Izv. AN Kazakh. SSR. Ser. gor. dela,  
met., stroi. i stroimat. no.2:28-35 '57. (MLRA 10:9)  
(Mining engineering) (Ore deposits)

AYTASHEV, G.A.; SHKUTA, L.A.; NOGAY, Yu.T.

Working of an inclined Espe lode. Izv. AN Kazakh. SSR. Ser.  
gor. dela no.1:3-9 '59. (MIRA 12:9)  
(Kazakhstan--Mining engineering.)

AYTBAYEV, B., kand.med.nauk

Clinical aspects and treatment of viral influenza in children.  
Zdrav. kazakh. 22 no.1:46-50 '62. (MIRA 15:3)

1. Iz kafedry detskikh bolezney lechebnogo fakul'teta (zav. -  
kand.med.nauk Sh.Z. Ibrayev) Kazakhskogo meditsinskogo instituta.  
(INFLUENZA)

AYTBAYEV, T.Kh.

Characteristics of the liver among inhabitants of a rural district  
in central Kazakhstan. Trudy Inst.kraev.pat.AN Kazakh SSR 12:156-  
159 '62. (MIRA 15:11)

(BRUCELLOSIS) (LIVER)

AYTBAYEV, T. Kh.

Normal content of total protein and its fractions in the blood  
of various healthy laboratory animals. Izv. AN Kazakh. SSR  
Ser. med. nauk 11 no.3:22-27 '64 (MIRA 18:1)

ALDANAZAROV, A.T.; AYTAYEV, T.Kh.; KUTIRKINA, N.A.

Changes in the protein composition of blood serum in lead poisoning in an experiment; preliminary report. Izv. AN Kazakh. SSR, ser. ~~medical~~ no. 2:48-53, 1963 (MIRA 16:10)  
(BLOOD PROTEINS) LEAD POISONING)

AYTBAYEV, T.Kh.

Serous mucoid and sialic acids in the blood in different laboratory animals. Izv. AN Kazakh. SSR. Ser. med. nauk 11 no.2:32-34 '64.  
(MIRA 17:7)

AYTBAYEV, V. A.

25965

Primeneniye ATSS Bogomol'tsa pri lieyentyerii dyetyei grudnogo voerasta. Edravookh - ranyeniye Kazakhstana, 1949, No. 4, c. 28-36.

SO: Letopis' No. 34



АЙТБАЙНВ, Яс., otvetstvennyy red.

[Kazakh S.S.R.; on the 40th anniversary of the Great October  
Socialist Revolution; a concise reference manual and bibliography]  
Kazakh SSR; Uly Oktiabr' sotsialistik revoliutsiasynyn 40 shyldygyna  
(munda kyskasha anyqtama materialdar berilip shene edobietter  
korsetildi). Zhauspty red. Al Tbaev E. Almaty, 1957. 233 p.  
[In Kazakh.] (MIRA 11:10)

(Kazakhstan)

AYTEENOV, B.T.

Basic proposition of the central axonometry. Sbor.nauch.-issl.  
rab.MTI no.12:233-234 '61. (MIRA 15:11)  
(Axonometric projection)

24,4600

39311

S/707/62/005/000/014/014  
D290/D303

AUTHOR: Aytekeyeva, Z.A.

TITLE: A system of rotating bodies of arbitrary shape in the general theory of relativity

SOURCE: Akademiya nauk Kazakhskoy SSR. Institut yadernoy fiziki. Trudy, v. 5. Alma-Ata, 1962. Fizika chastits vysokikh energii. Struktura yadra, 164-173

TEXT: The author derives the gravitational equations for a system of rotating bodies of arbitrary shape, and develops the relativistic equations of translational motion of the centers of gravity of the bodies and of rotational motion of the bodies about their centers of gravity from the gravitational equations. She uses an approximate method due to Fok (Ref. 1: Fok V.A. ZhETF, 9, 375, 1939), and assumes that the gravitational field is weak over all space, that the velocities of the bodies are small compared with the velocity of light, and that the distances between the bodies are large compared with their linear dimensions. She derives the equa-

Card 1/2

20994

S/058/61/000/005/001/050  
A001/A101

24. 4200

AUTHORS:

Aytikeyeva, Z.A., Petrova, N.M.

TITLE:

On the system of spherically symmetric bodies in the general theory of relativity

PERIODICAL:

Referativnyy zhurnal. Fizika, no 5, 1961, 17, abstract 5A208 (V sb. "Issled. protsessov perenosa. Vopr. teorii otnositel'nosti", Alma-Ata, 1959, 209 - 229)

TEXT:

Gravitational equations are solved for a system of rotating bodies in the harmonic coordinate system by the approximate method of V.A. Fok (Zh. eks-perim. i teor. fiz.", 1939, v 9, 375). Equations of motion of inertia centers of bodies and equations of rotation of bodies about their inertia centers are found from the condition of harmonicity.

[Abstracter's note: Complete translation.]

Card 1/1

PHASE I BOOK REPRODUCTION 807/5179

Alma-Ata, Kazakhstan. Universitet.

Isledovaniya professorov. Voprosy teorii chislennosti (Study of Numerical Problems. Problems in the Theory of Relativity) Alma-Ata, 1979. 256 p. Errata slip inserted. 1,000 copies printed. (Series: Its Itydy)

Sponsoring Agency: Ministerstvo vysshego obrazovaniya SSSR and Kazakhskiy gosudarstvennyy universitet im. S.M. Kirova.

Editorial Board: V.P. Koshbarov, M.D. Kozov, and S.M. Petrova; Resp. Ed.: L.A. Valls; Tech. Ed.: L.D. Koshbarov.

PURPOSE: This collection of articles is intended for research physicists and engineers. It can also be used by instructors and students at universities.

COVERAGE: The articles of this collection concern the results of 13 seminars in the field of the general theory of relativity held from 1956 to 1978 by the staff of the Institute of Physics and Mathematics of the Kazakh State University.

Physics of the S.M. Kirov Kazakh State University). The articles are arranged in two groups. Group one contains 16 articles concerning the research activity of the Kazakh State University Laboratory for General Relativity (General Relativity of the Department of General Physics) in the investigation of transport processes of matter, impulse and energy; group two contains the articles reporting on studies of the Department of Theoretical Physics on problems of the theory of relativity. Article one of the collection is an introduction to the theory of relativity of transport processes and gives a fairly detailed bibliography of contributions of members of physics departments of Kazakh State University. No personalities are mentioned. References accompany each article.

TABLE OF CONTENTS:

Elinger, V.G., and V.Y. Romshin. Simulation of Light Produced by Gamma Radiation From a Cylindrical Source	89
Babovich, I.I., and V.G. Elinger. Light Exchange Between Mirror and Diffuse Surfaces	97
Kozov, M.D. Application of the Normal Thermal Engine Method in the Determination of the Coefficient of Diffusion of Liquids	101
Vysshinskiy, V.P., and M.D. Kozov. Temperature Dependence of the Coefficient of Diffusion of Gases	114
Kozov, M.D. Relation Between Coefficients of Inter- and Self-Diffusion	126
Byzina, A.F., and V.P. Koshbarov. Free-Like Laminar Twisted Stream of Gas Under Compression	137
Koshbarov, V.P. Motion of a Viscous Liquid Inside a Cone With a Porous Side Surface	153
Koshbarov, V.P. An Analytical Solution of the Equation of Energy	162
Koshbarov, V.P. Contribution to the Investigation of the Thermal Radiation of a Turbulent Process	167
Zurebkhin, E.E., and G.Z. Fyodorov. Turbulent Mixing in Volume	177
Koshbarov, V.P., and V.A. Pcheluyko. The Malgrov-Shulykha Method in Its Application to the Fluid Surface Problem	185
II. PROBLEMS OF THE THEORY OF RELATIVITY	
Petrova, S.M. Laws of Conservation for a System of Rotating Bodies in the General Theory of Relativity	198
Apsharova, E.A., and S.M. Petrova. The System of Spherically Symmetrical Bodies in the General Theory of Relativity	209
Koshbarov, V.P. Tensors of a Moment of Momentum (Kinetic Momentum) and a Moment of Force in Relativistic Mechanics	229

AVAILABLE: Library of Congress (DT71-A15)

Card 5/5

04/04/80  
7-83-81

24.4600

S/058/61/000/009/001/050  
A001/A101

AUTHOR: Aytskeyeva, Z.A.

TITLE: System of bodies of arbitrary shape in the general theory of relativity

PERIODICAL: Referativnyy zhurnal. Fizika, no. 9, 1961, 9, abstract 9A127 ("Izv. AN KazSSR, Ser. matem. i mekhan.", 1960 (1961), no. 9 (13), 65-78, Kaz. Summary)

TEXT: The author derives equations of motion for a system of bodies of arbitrary shape moving translationally. The method proposed by V.A. Fok was used, which consists in the approximate calculation of the metrical tensor components and the joint determination of the mass tensor. Conditions were found under which rotation of the bodies can not arise. The values of components of the matter tensor are determined for arbitrary-shape bodies in the second approximation.

[Abstracter's note: Complete translation]

Card 1/1

S/279/63/000/001/013/023  
E075/E452

**AUTHORS:** Bresnyakov, A.A., Dautova, L.I., Aytkhozhin, E.S.  
(Alma-Ata)

**TITLE:** On the problem of the nature of the rheotropic  
brittleness

**PERIODICAL:** Akademiya nauk SSSR. Izvestiya. Otdeleniye  
tekhnicheskikh nauk. Metallurgiya i gornoye delo.  
no.1, 1963, 142-143

**TEXT:** If a cold brittle metal is deformed plastically in the absence of recrystallization, then the brittle state transition temperature decreases and the plasticity at room temperature increases. This phenomenon was called rheotropic brittleness. The authors investigated the nature of this phenomenon on zinc of a high purity (99.998%). The plasticity was determined by 180° bending, using strip specimens 0.5 mm thick and 5.75 mm wide, the determinations being made immediately after cutting, after 6 months storing and after heat treatment at temperatures 50, 75, 100 etc (in 25°C intervals) up to 400°C in air for one hour. In addition, electrical conductivity measurements and X-ray  
Card 1/2

On the problem of the nature ...

S/279/63/000/001/013/023  
E075/E452

photographs were taken after each heat treatment. The results obtained showed that generally accepted views on the rheotropic brittleness do not hold in the case of zinc; on the contrary, it was shown that high plasticity can be obtained by deformation above the recrystallization temperature. This plasticity is retained to some extent after the recrystallization is completed. It is thought that the views on the appearance of the rheotropic brittleness after deformation below the recrystallization temperature were due to the fact that previous investigations were carried out on metals with high recrystallization temperatures. There are 3 figures.

SUBMITTED: February 17, 1962

Card 2/2



AYTKHOZHIN, N.S.; SAMOYLOV, V.A.

Rheotropic recovery in zinc. Trudy Inst. met. i obog. AN Kazakh.  
SSR 7:19-23 '63. (MIRA 17:6)

PRESNYAKOV, A.A.; DAUTOVA, L.I.; SANDYLOV, V.A.; AITKHOZHIN, E.S.

Causes of structural anomalies and the properties of zinc.  
Trudy Inst. met. i obog. AN Kazakh. SSR 7:3-18 '63.

(MIRA 17:6)

AYTKHCZHIN, E.S.; PRESNYAKOV, A.A.

Effect of prestressing on the plasticity and electric resistivity of polycrystalline zirc. Trudy Inst. met. i obog. AN Kazakh. GSN 10:75-82 '64.

Effect of the speed of tension on the development of rheotropic recovery in zirc. Ibid.:82-85 (MIRA 18:7)

PRESNYAKOV, A.A.; SAMOYLOV, V.A.; AYTKHOZHIN, E.S.

Structural transformations in  $\beta$ -brass. Fiz. Met. i metalloved.  
20 no.1:142-143 JI '65. (MIRA 18:11)

1. Institut metallurgii i obogasheniya AN KazSSR.

L 04175-67

ACC NR: AT6027301

tion and the strain rate. At crosshead speeds greater than 0.02 mm/sec the transition from brittle to plastic states proceeded monotonically and the general plasticity was lower. The minima were caused by rheotropic embrittlement and comparisons were made with rheotropic embrittlement in zinc. <sup>3</sup> The ultimate tensile strength at room temperature increased proportionally as a function of prior deformation, but decreased exponentially as a function of temperature. After annealing at 300°C for 8 hrs, the samples with 60% prior deformation decreased in strength as a function of temperature by the same amount as samples deformed 20% without annealing. The difference between hot pressed and cast samples was that cast samples did not exhibit rheotropic embrittlement. For pure magnesium, rheotropic embrittlement reaches a maximum after about 60% deformation. Orig. art. has: 5 figures. <sup>16</sup>

SUB CODE: 11/

SUBM DATE: none/

ORIG REF: 007/

OTH REF: 002

Card 2/2 LC

L 10300-67 INT(m)/ESP(t)/INT IJP(c) JD

ACC NR: A17003050

SOURCE CODE: UR/2817/66/015/000/0028/0031

AUTHOR: Dahanbusinov, Ye. A.; Aytkhozhin, E. S.; Presnyakov, A. A. 27

ORIG: none

TITLE: Certain features of variation in electric resistance of copper-gold alloys approximating the CuAu composition

SOURCE: AN KazSSR. Institut metallurgii i obogashcheniya. Trudy, v. 15, 1966, 28-31

TOPIC TAGS: copper alloy, gold alloy, electric resistance

ABSTRACT: Experimental data on ordering of a CuAu alloy is given. Electrical resistance was measured by the compensation method with the use of a potentiometric device housing a PPTN-1 potentiometer and an M21 galvanometer. Wires made of an alloy of copper and gold having a composition close to CuAu and a diameter of 1 mm underwent investigation. The specimen was annealed at temperatures of 100, 200, 300, 400, 500 and 600°, and electrical resistance determined as a function of the tempering temperature after quenching from 600°. After each heat treatment the electrical resistance was measured with an accuracy up to 0.05%.

The initial stage of ordering of the CuAu alloy associated with the conversion of one structural form (CuAu I) into another (CuAu II), promotes the appearances of two minima on the electrical resistance curve in the region of 275-300 and 300-350°. The emergence of a new structural form associated with the terminal stage of ordering leads to an anomalous variation in electrical resistance in the 450-500° region. The presence of transformations in the 400-500° region confirms literature data. Orig. art. has: 3 figures. [JPRS]

SUB CODE: 11 / SUBM DATE: none / ORIG REF: 005 / OTH REF: 008

Card 1/1 33

ATKHCZHIN, M.A.; BELITSINA, N.V.; SPIRIN, A.S.

Nucleic acids in the early stages of development of fish embryos; based on the example of the loach *Misgurnus fossilis*.  
Biokhimiia 29 no. 1:169-175 Ja-F '64. (MIRA 18:12)

1. Institut biokhimiim imeni Bakha AN SSSR, Moskva. Submitted August 12, 1963.

ACCESSION NR: AP4043197

S/0070/64/009/004/0574/0574

AUTHORS: Aytkhozhin, S. A.; Semiletov, S. A.

TITLE: Preparation of GaSb thin films by vacuum evaporation

SOURCE: Kristallografiya, v. 9, no. 4, 1964, 574

TOPIC TAGS: gallium compound, thin film, vacuum evaporation, electron diffraction, crystallite, carrier mobility, carrier density

ABSTRACT: The electrical properties of GaSb thin films have not been sufficiently investigated because the composition of the films differs considerably from that of the original material. The method of preparing GaSb films described in this paper consists in continuously supplying a small amount of material to a preheated evaporator by means of a screw turning inside a hollow cylinder. The temperature of the evaporator was chosen such as to allow a sufficiently fast rate of evaporation of gallium. The structure of the thin films

Card 1/3



ACCESSION NR: AP4043197

was investigated by electron diffraction. In thin layers the GaSb was found to be amorphous with  $d_1 = 3.50$ ,  $d_2 = 2.00$ , and  $d_3 = 1.30$  Å.

The maximum temperature at which the amorphous phase still appears depends on the substrate and on the rate of deposition. At higher temperatures the films are a polycrystalline mixture of the cubic and previously observed hexagonal phase. Hall measurements and electron diffraction showed the films to be stoichiometric. The starting material for preparing the films was p-type GaSb with a carrier mobility  $670$  cm<sup>2</sup>/v-sec and a carrier density  $1.75 \times 10^{17}$  cm<sup>-3</sup>, while the films had a carrier mobility of  $630$  cm<sup>2</sup>/v-sec and a carrier density of  $1.5 \times 10^{17}$  cm<sup>-3</sup>. This relatively low carrier concentration indicates the possibility of obtaining stoichiometric samples and the high mobility indicates the sufficiently good quality of the crystallites constituting the film. 'The authors thank Prof. Z. G. Pinsker for a discussion and useful advice.' Orig. art. has: 1 table.

Card 2/3

ACCESSION NR: AP4043197

ASSOCIATION: Institut kristallografii AN SSSR (Institute of  
Crystallography, AN SSSR)

SUBMITTED: 15Jan64

SUB CODE: SS

NR REF SOV: 002

ENCL: 00

OTHER: 001

Card 3/3

AYTKHOZHIN, S.A.; SEMILETOV, S.A.

Production of thin GaSb films by evaporation under vacuum.  
Kristallografiia 9 no.4:574 J1-Ag 64.

1. Institut kristallografii AN SSSR.

(MIRA 17:11)

L 50308-65 EWT(l)/EWT(m)/EWP(1)/T/EWP(t)/EWP(b)/EWA(h)/EWA(c) Ps-6/Peb IJP(c)  
 JD/AT  
 UR/0070/65/010/004/0492/0496  
 30  
 27 B

ACCESSION NR: A15018716

AUTHOR: Aytkhozin, S. A.; Semiletov, S. A.

TITLE: Structure and electrical properties of thin films of p-type gallium antimonide

SOURCE: Kristallografiya, v. 10, no. 4, 1965, 492-496, and top half of insert facing p. 475

TOPIC TAGS: A<sup>3</sup>B<sup>5</sup> semiconductor, gallium antimonide, polycrystalline thin film, thin film preparation, thin film structure, electrical property

ABSTRACT: The preparation, structure, and electrical properties of GaSb polycrystalline thin films have been studied because of the known impossibility for obtaining GaSb crystals with electrical characteristics (donor concentration) comparable to those of other A<sup>3</sup>B<sup>5</sup> semiconductor compounds. Polycrystalline GaSb thin films (up to 100 μ thick) were prepared from p-type single crystals by vacuum vaporization on an amorphous (glass or quartz) or crystalline (phlogopite) substrate heated at a temperature in the 420-6200 range. Electron diffraction patterns of the films indicated the presence of cubic and hexagonal phases in the films grown under optimum conditions. Microphotographs of the films showed an increasing accumulation of

Card 1/2

L 59508-65

ACCESSION NR: AP5018716

Ga excess (over stoichiometry) on the crystalline process of film deposition on a heated substrate increased with increasing substrate temperature of the -190 to 700C range) of electric conductivity of the 10 μ thick films followed nearly identical substrate temperature. The Hall constant pattern conductors. The absolute values of electric parameters were found to be 0.68 ev and 0.017 ev, respectively. The calculated forbidden energy gap and activation energy of impurity centers were found to be 0.68 ev and 0.017 ev, respectively. The conclusion was made that polycrystalline films deposited under optimum conditions approach single crystals in respect to basic electrical parameters. A considerable increase in hole mobility with decreasing temperature in GaSb thin films was compared with the earlier established opposite temperature dependence pattern of hole mobility in InSb films.

Orig. art. has 6 figures, 1 table, and 2 formulas.

es with increasing substrate temperature and vaporization time, owing to a partial decomposition of GaSb in the process. Dimensions of crystallites also The temperature dependence (in Hall constant, and hole mobility patterns, regardless of the substrate type) was typical of the hole-type semiconductors. Parameters varied with the substrate temperature. The activation energy of impurity centers was nearly close to that of single crystals in InSb films. The conclusion was made that polycrystalline films deposited under optimum conditions approach single crystals in respect to basic electrical parameters. A considerable increase in hole mobility with decreasing temperature in GaSb thin films was compared with the earlier established opposite temperature dependence pattern of hole mobility in InSb films.

ASSOCIATION: Institut kristallografi AN SSSR (Institute of Crystallography, AN SSSR)

SUBMITTED: 03 Dec 64  
NO REP SOV: 102  
Card 2/2

ENCL: 0  
OTHER: 011

SUB CODE: SS  
ATD PRESS: 4052

[JK]

AYTKOZHIN, V.

Instructive experience of geological surveyors. Bezop truda  
v prom. 7 no.4:14-16 Ap '63. (MIRA 16:4)

1. Gornotekhnicheskiy inspektor Upravleniya Vostochno-  
Kazakhstanskogo okruga Gosudarstvennogo komiteta pro Sovete  
Ministrov Kazakhskoy SSR po nadzoru za bezopasnym vedeniyem  
rabot v promyshlennosti i gornomu nadzoru.  
(Geological surveys)

SHAKULOV, U.S.; AYTKHOZHIN, M.A.; SPIRIN, A.S.

Latent degradation of ribosomes. Biokhimiia 27 no.4:744-751  
J1-A; '62. (MIRA 15:11)

1. Institute of Biochemistry, Academy of Sciences of the U.S.S.R.,  
Moscow. (NUCLEOPROTEINS)

BELTSINA, N.V.; GAVRILOVA, L.P.; AYTKHOZHIN, M.A.; NEYFAKH, A.;  
SPIRIN, A.S.

Informational ribonucleic acid at early stages of the development  
of the embryos of the loach (*Misgurnus fossilis*). Dokl. AN SSSR 153  
no.2:464-467 N '63. (MIRA 16:12)

1. Institut biokhimi im. A.N.Bakha. AN SSSR i Institut morfologii  
zhivotnykh im. A.N.Seveftsova AN SSSR. Predstavleno akademikom  
A.N.Belozerskim.



BARABANENKOV, M.N.; TOLKACHEV, A.A.; AYT KHOZHIN, N.A.; LESOTA, O.K.

Scattering of an electromagnetic  $\delta$ -impulse on perfectly conducting  
bodies with finite dimensions. Radiotekh. i elektron. 8 no.6:  
1069-1071 Je '63. (MIRA 16:7)

(Electromagnetic waves)

MIRRAKHIMOV, M. M.; AYTKULOVA, A. U.

Intermediate metabolism in patients with diseases of the bile  
ducts. Terap. arkh. 33 no.5:76-79 My '61. (MIRA 14:12)

1. Iz kafedry propedevtiki vnutrennikh bolezney (zav. - dotsent M. M.  
Mirrakhimov) Kirgizskogo meditsinskogo instituta.

(BILE DUCTS--DISEASES) (METABOLISM)

KULANOVA, R.I.; GIMMERIKH, F.I.; AYTKULOVA, A.U.

Mechanism of glucose therapy. Sov. zdrav. Kir. no.3:26-29 My-Je '62.

(MIRA 15:4

1. Iz kafedry propedevticheskoy terapii (zav. - dotsent M.M.Mirrahimov)  
Kirgizskogo gosudarstvennogo meditsinskogo instituta i laboratorii biokhimii  
Instituta krayovoy meditsiny AN Kirgizskoy SSR (zav. - dotsent F.I.  
Gimmerikh).

(GLUCOSE)

AYEKUZHINA, B.S.

Use of oxyhemometry in children. Zdrav. Kazakh. 22 no.8:47-51'62  
(MIRA 17:4)

1. 1. Iz Kazakhskogo instituta okhrany materinstva i detstva  
(direktor - A.B. Bisenova).

AYTMAMBETOV, D.

Dissertation defended for the degree of <sup>Candidate</sup>~~Doctor~~ of Historical Sciences in the  
Institute of History

"Pre-Revolutionary Schools in Kirgizia."

Vestnik Akad. Nauk, No. 4, 1963, pp 119-145

AYTMATOV, I.T.

Studying the properties of growth. Izv. AN Kir. SSR. Ser.  
est. 1 tekhn. nauk 5 no.1:63-75 '63. (MIRA 16:11)

IVANCHIKOVA, E.I.; KOLESNIKOVA, M.T.; KONOBEITSKAYA, Ye.M.; KUDRYASHOVA,  
M.M.; KUL'BAYEVA, Sh.N.; MEDVEDEVA, S.G.. Prinsipali uchastiye:  
ABDULLINA, M.N.; KLIMENKO, K.M.; OVSYANKINA, V.I.; SOKOLOV, M.V.;  
URAZOVA, M.I.; VOROB'YEVA, G.P.. AHMEDOVA, N.B., otv.red.;  
NOVOKHATSKIY, I.P., red.; SHEVCHUK, T.I., red.; AITMUKHAMBETOVA,  
S.; BOROKINA, Z.P., tekhn.red.

[The Karaganda Economic Administrative Region; bibliography]  
Karagandinski ekonomicheski administrativnyi raion; biblio-  
graficheski ukazatel' literatury. Alma-Ata, 1959. 458 p.

(MIRA 13:2)

1. Akademiya nauk Kazakhskoy SSR. Alma-Ata. Tsentral'naya  
nauchnaya biblioteka.

(Bibliography--Karaganda Economic Region)  
(Karaganda Economic Region--Bibliography)

KUTAEAYEV, K.; TOMANOV, M.; ABDRAKHMANOV, A., kand. filol. nauk,  
red.; AYTMUKHAMBETOVA, S., red.; KOHOTOVSKIY, M.P., red.;  
KHUDYAKOV, A.G., tekhn. red.

[Russian-Kazakh dictionary] Russko-Kazakhskii terminologicheski  
skii slovar'. Alma-Ata, Izd-vo Akad.nauk Kazakhskoi SSR. 4  
Vol.9. [Terms used in construction and for building materials]  
Terminy stroitel'stva i stroitel'nykh materialov. Pod obshchei  
red. A.Abrakhmanova. 1962. 162 p. (MIRA 15:7)

1. Akademiya nauk Kazakhskoy SSR. Alma-Ata. Institut iazyko-  
znaniya.

(Russian language--Dictionaries--Kazakh)  
(Building--Dictionaries)



BAKAYEV, M.T.; NUGMANOV, K.Kh.; SEYDUALIYEV, Z.S.; IBRAYEV, Sh.I.;  
ULUKBEKOV, O.K.; RUSIN, A.Ch., doktor tekhn. nauk, prof.,  
red.; AISRAKHMANOV, A., kand. filolog. nauk; ASAIYEV, M.,  
red.; AYTUKHAMBETOVA, S., red.; ZHUKOVA, N.D., red.;  
KHUDYAKOV, A.G., tekhn. rod.

[Russian-Kazakh dictionary of terminology] Russko-kazakhskii  
terminologicheskii slovar'. Alma-Ata, Izd-vo Akad. nauk  
Kazakhskoi SSR. Vol.12[Mining]Gornoe delo. 1962. 281 p.  
(MIRA 15:11)

1. Akademiya nauk Kazakhskoy SSR, Alma-Ata. Institut yazyk-  
koznaniya.

(Mining engineering--Dictionaries)  
(Russian language--Dictionaries--Kazakh)

**AUTHOR:** AYTMUEZAYEV, T. PA - 3040

**TITLE:** A Method for the Solution of the Equations of a Non Steady Gas Flow by taking Account of the Dissipative Processes in the Relativity. (Russian)

**PERIODICAL:** Doklady Akademii Nauk SSSR, 1957, Vol. 113, Nr 4, pp 769-772 (U.S.S.R.)  
Received: 6 / 1957 Reviewed: 7 / 1957

**ABSTRACT:** The author here investigates the relativistic, not steadied flow of a viscous, heat-conductive gas within gravitating masses. The equations of motion and the energy equation are contained in the equations:

$$\partial \mathcal{T}^{ik} / \partial x^k + \int_{km}^d T^{mk} + \int_{km}^k T^{im} = 0.$$

In the present case the energy-momentum tensor of the material medium, which itself creates a gravitating field, is as follows:  $T^{ik} = w u^i u^k - p g^{ik} + \mathcal{T}^{ik}$ . Here  $w$  denotes the thermal function,  $p$  - pressure,  $u^i$  - the notional velocity of energy. - In the case of the viscous heat-conductive gas of the relativity mechanic the velocity of motion of energy, but not the velocity of flow of matter is regarded as macroscopic velocity. The stress tensor of the friction  $\mathcal{T}^{ik}$  and the continuity equation of the flow of matter are given explicitly. As a third equation the equations of the field of gravitation itself are used:  $R_{ik} = \mathcal{L}(T_{ik} - (1/2)Tg_{ik})$ .

Further, the spherically-symmetric field of gravitation within the gravitating masses in a system of coordinates moving with energy, is

Card 1/2

AYDUBRZAYEV, T., Cand Phys-Math Sci --(disc) "Single-measure ir-  
regular flow of gas ~~with computation of~~ <sup>taking into account</sup> dissipative processes in  
the general theory of relativity." France, 1958. 11 pp (Kirgiz  
State Univ. Phys-Math Faculty) 170 copies--(on the title heading  
erroneously: "Simultaneous irregular...--" (KL, 20-58, 92)

AYTMURZAYEV, T.

One-dimensional unsteady gas flow taking into consideration the  
dissipation processes of the general relativity theory. Izv. vys.  
ucheb. zav.; fiz. no.3:82-90 '58. (MIRA 11:9)

1. Kirgizskiy gosuniversitet.  
(Gases, Kinetic theory of)

88010

S/139/60/000/006/002/032

E032/E314

11.7400

AUTHOR: Avtmurzayev, T.

TITLE: One-dimensional Nonsteady Gas Flow on the General Theory of Relativity, Including Dissipative Processes

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Fizika, 1960, No. 6, pp. 15 - 19

TEXT: The analysis starts with the following model: a gaseous sphere is heated to a very high temperature so that relativistic effects must be taken into account; the sphere is held by its own gravitational field. Radial pulsations of this model are then analysed, taking into account dissipative processes. The medium is looked upon as a mixture of two gases, namely, an ideal gas and a photon gas. It was shown by Landau and Lifshits (Ref. 3) that under these conditions thermodynamic quantities are additive and the thermodynamic parameters  $\epsilon$ ,  $p$ ,  $\sigma$  can be expressed (the author, Ref. 1, Stanyukovich, Ref. 4 and Sommerfel'd, Ref. 5) in the form

Card 1/3

88010  
S/139/60/000/006/002/032  
E032/E314

**One-dimensional Nonsteady Gas Flow on the General Theory of Relativity, Including Dissipative Processes**

$$\begin{aligned} \epsilon &= \rho c^2 + \frac{3}{2} \frac{k}{m} \rho T + \chi T^4, & p &= \frac{k}{m} \rho T + \frac{1}{3} \chi T^4, \\ \sigma &= \frac{k}{mc^2} \left( \frac{3}{2} \ln T - \ln \rho \right) + \frac{4}{3} \frac{\chi T^3}{\rho c^2}, \end{aligned} \quad (1)$$

where  $m$  is the rest mass of the ideal gas,  
 $T$  is the absolute temperature,  
 $c$  is the velocity of light,  
 $k$  is the Boltzmann constant, and  
 $\chi$  is the Stefan-Boltzmann constant.

The set of equations (A) given in Ref. 1 is then used to derive differential equations containing the thermodynamic quantities  $T$ ,  $\rho$  and  $\lambda$ ,  $\gamma$ ,  $\nu$  only. These equations are

Card 2/3

880/0

S/139/60/000/006/002/032

E032/E314

One-dimensional Nonsteady Gas Flow on the General Theory of Relativity, Including Dissipative Processes

the energy equation, the momentum equation, the continuity equation and the gravitational-field equation. The differential equations are then solved by the power-series method. It is assumed that the initial line in the space

$(r, t)$  is  $T = ar^2$ . Two cases are then distinguished, namely: a) the velocity of light at the centre of mass is equal to unity and, b) the velocity of light is arbitrarily defined along the initial line (Cauchy problem). There are 6 Soviet references.

ASSOCIATION: Kirgizskiy gosuniversitet (Kirgiz State University)

SUBMITTED: October 14, 1959

Card 3/3

ACCESSION NR: AP4015123

S/0124/63/000/012/B002/B002

SOURCE: RZh. Mekhanika, Abs. 12B6

AUTHOR: Aytmurzayev, T.; Ary\*nov, A.; Arkabayev, N.

TITLE: One-dimensional unstable motions of gases with consideration of electromagnetic fields

CITED SOURCE: Sb. Materialy\* 10 Nauch. konferentsii prof.- prepodavat. sostava fiz.-matem. fak. Sekts. fiz. Frunze, 1961, 39-41

TOPIC TAGS: gas motion, gas mechanics, electromagnetic field

TRANSLATION: For a system of equations describing unstable one-dimensional relativistic motions of a superconductive gas in an electromagnetic field, the authors write out a system of characteristic equations which permit the numerical computation of the flow field under the specified initial conditions. V.A. Skripkin.

DATE ACQ: 31Dec63

SUB CODE: PH

ENCL: 00

Card 1/1



ACC NR: AT6036284

SOURCE CODE: UR/0000/66/000/000/0054/0065

AUTHOR: Stanyukovich, K. P.; Aytmurzayev, T.; Arkabayev, N.

ORG: none

TITLE: Axisymmetric self-similar relativistic gas flows

SOURCE: AN KirgSSR. Institut fiziki i matematiki. Ploskoparallel'noye i osesimmetricheskoye techniye gazov i zhidkostey (Plane-parallel and axisymmetric flow of gases and liquids). Frunze, Izd-vo Ilim, 1986, 54-85

TOPIC TAGS: relativistic flow, similarity theory, Prandtl boundary layer

ABSTRACT: A finite form of a set of equations of motion is derived for a relativistically moving gas using a general orthogonal curvilinear coordinate system. This system is applied to a case of self-similar stationary relativistic flow with axisymmetric properties for which a spherical coordinate system is shown to be convenient. The solution is obtained in a quadrature form suitable for numerical calculations and which for the case of a very small gas velocity relative to that of light can be expanded in negative powers of the speed of light. This solution has properties which allow considerable simplification in the ultra-relativistic cases. The axisymmetric problem is further extended to include nonstationary flows. Two classes of self-similar flows are considered and it is shown that in both cases the problem can be described by a system

Card 1/2

ACC NR: AT60362(14)

of four ordinary differential equations. These equations describe the motion of the gas in one plane since otherwise the similarity conditions are violated. Orig. art. has: 32 formulas.

SUB CODE: 20/

SUBM DATE: 28Apr66/

ORIG REF: 005

Card 2/2

124-58-6-6668

Translation from: Referativnyy zhurnal, Mekhanika, 1958, Nr 6,  
p 52 (USSR)

AUTHOR: Aytsam, A.M.

TITLE: On the Rational Selection of a Type of Water Gate for River  
Beds in the Plains Areas of the USSR (K voprosu o ratsional'nom  
vybore tipa zatvorov v usloviyakh ravninnykh rek Sovetskogo  
Soyuza)

PERIODICAL: Tr. Tallinsk. politekhn. in-ta, 1957, Vol A, Nr 117,  
24 pp., ill.

ABSTRACT: Bibliographic entry

1. Inland waterways--Control systems

Card 1/1

AYTSAM, A. M.: Master Tech Sci (diss) -- "Analysis of the operation of raising and lowering gates on spillway dams under the conditions of lowland rivers". Leningrad. 1958. 22 pp (Leningrad Polytech Inst im M. I. Kalinin), 150 copies (KL, No 5, 1959, 148)

TEPAKS, L.A., dotsent, Kand.tekhn.nauk; AITSAM, A.M. [Aitsam, A.], kand.tekhn.  
nauk

Calculation of water hammer in low-pressure hydroelectric power  
stations. Izv. vys. ucheb. zav.; energ. 4 no.3:93-97 Mr '61.

(MIRA 14:3)

1. Tallinskiy politekhnicheskii institut. Predstavlena kafedroy  
gidravliki.

(Hydroelectric power stations)(Water hammer)

AYTUGANOV, P. N.

Mice - Extermination

Automatic mouse trap. Pchelovodstvo 30, No. 2, 1953.

Monthly List of Russian Accessions, Library of Congress, June 1953. Unclassified.

AYTUGANOV, R. polkovnik

Tactical training of a tank company with field firing at night.  
Voen. vest. 38 no. 8:51-55 Ag '58. (MIRA 11:7)  
(Tank warfare)  
(Night fighting(Military science))

USSR / Pharmacology, Toxicology. Chemo-Therapeutic Preparations. V  
Antibiotics.

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 27912

Author : Gridneva, L.; Aytuganov, Zh.  
Inst : Alma-Ata Veterinary Institute  
Title : Morphologic Blood Indexes and Phagocytic Activity of  
Leukocytes in Sheep Under Influence of Biomycin

Orig Pub : Sb. stud. nauchn. rabot Alma-Atinsk. zoovet. in-ta, 1958,  
vyp 3, 39-43

Abstract : By two gelded rams, biomylin (I) was introduced in a dose  
of 25 mg/kg. By interrupted application of I, a more  
significant increase of Hb takes place than in continuous  
application. It is proportional to the increase of number  
of erythrocytes. In the leukocytic formula, eosinopenia,  
small lymphocytosis, and neutropenia with a shift to the  
left are noted. Phagocytic activity of leukocytes increases

Card 1/2

USSR / Pharmacology, Toxicology. Chemo-Therapeutic Preparations. V  
Antibiotics.

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 27912

in uninterrupted administration of I and weakens in  
interrupted course of treatment. -- From the authors'  
resume

Card 2/2



ARIFOV, U.A.; AYUKHANOV, A.Kh.; ISLANOV, I.I., chlen-korrespondent.

Modernized drying cabinet. Dokl.AN Uz.SSR no.8:30-33 '49. (MLRA 6:5)

1. Fiziko-tekhnicheskiy institut AN Uz.SSR (for Arifov, Ayukhanov).
2. Akademiya Nauk Uzbekskoy SSR (for Islamov). (Drying apparatus)

3

AYUSHANOV, A. KH.  
CA

Determination of the absolute ionization coefficient on the surface of incandescent tungsten. U. Arifov, A. Kh. Ayushanov, and V. M. Lopyov (Acad. Sci. Uzbek S.S.R., Tashkent). *Doklady Akad. Nauk S.S.S.R.* 68, 461-3 (1949).

Alkali metal atoms impinge on an incandescent W wire at the rate of  $N_0$  atoms/sec. With the collector pos.,  $N_0 \propto n A e^{-\lambda_0 / l}$  ( $n$  = no. of adsorbed atoms at equil.,  $\lambda_0$  = heat of evapn. of atoms); in this case, the adsorbed alkali metal can evap. only in the form of neutral atoms. With the collector neg.,  $N_0 = n^+ A e^{-\lambda_0 / l} + n^- A e^{-\lambda_0 / l}$  ( $\lambda_0$  = heat of evapn. of pos. ions); in this case, the alkali metal can evap. in the form either of atoms or of ions. If the potential of the collector is suddenly changed from pos. to neg., the ionic current falls from an initial max.,  $I_0$ , to a const.,  $I_\infty$ . Since  $I_0 = n S B e^{-\lambda_0 / l}$  and  $I_\infty = n^+ S B e^{-\lambda_0 / l}$  ( $S$  = surface area of the wire),  $I_0 / I_\infty = n / n^+ = 1 + (n_0 / n_+)$ , where  $n_+$  and  $n_0$  = no. of ions and of atoms, resp., emitted from 1 sq. cm. of surface per sec. Hence the ionization coeff.  $k = n_+ / (n_0 + n_+) = (I_0 - I_\infty) / I_0$ . The current is oscillographed under alternating rectangular impulses applied to the collector, at a frequency (200 sec.<sup>-1</sup>) insuring complete evapn. of the excess adsorbed atoms over a half-period. Oscillograms are given for incandescence temps. of 1100, 1215, 1310, and 1380°K; max. ionization is at 1310°K. As a function of the temp.,  $k$ , detd. from  $I_0$  and  $I_\infty$  measured on the oscillograms, remains 0 at 1310°K, then falls to ~80 at 1380°K. The exptl. curve of  $k$  is close to the Saha-Langmuir line, with  $A = 1$  (Copley and Plapp, *Phys. Rev.* 48, 1000 (1943)) at the max. and up to about 1340°K, but comes increasingly nearer to the S-L. line drawn with  $A = 2$  with further increasing temp. This complex behavior is attributed to surface inhomogeneity. N. Thon

- Physics Tech. Inst.

1951

AYURKHAMON. ARK.

... of the absolute ionization potential of the surface of hot metal. (U. S. Pat. 2,415,100, V. M. Lyubov, *Trudy Akad. Nauk S.S.S.R.* 3: 13-19 (1950).)

... pressure  $P$  a number  $N$  of atoms ... and the collector is the wire ... number can be expressed as  $N = N_0 \exp(-Ae^{-\phi/kT})$  ... collector is neg.  $N = N_0 (Ae^{-\phi/kT})^{-1}$  ... case atoms can evaporate ... both as loss and atoms. ... the number of atoms on the ...  $Ae^{-\phi/kT}$  and  $Be^{-\phi/kT}$  are possible ...  $\phi$  and  $\phi_0$  are heats of ...  $A$  and  $B$  coeffs. but slightly ... On suddenly changing collector ... current has a max. value  $I_0$  during ... and then drops to a constant value ... return to the wire. Ionic currents ...  $I_0 = eSNe^{-\phi/kT}$  and  $I_0 = eS_0N_0 \exp(-\phi_0/kT)$  and then  $w/n = (1 + n^2/n_0^2)^{-1/2}$  ... ions and ion current of vapor. ... tion will then be  $K = n^2/n_0^2 (1 + n^2/n_0^2)^{-1/2}$  ...  $I_0 = I_0/I_0$ . Necessary ionic currents were measured device (kerosene given ... of K vapor, the hole between the ... created by 50 cycles, 500-600 v ... will return. The coeff. of K vapor ... given by an experimentally derived ... and then drops, indicating a ... phenomena.

... of Kh NG

... that ... a ... is ... and ... ) ... in ... a ... out ... caps ... d by ... neg. ... ions ... can be exp ...  $I_0 = eS_0N_0 \exp(-\phi_0/kT)$  or ... of ... d, in ... and ... collector ... at ... which ... of the ...

AYUKHANOV, A. KH.

Electronics, Electronic and Ionic Emission (1731)

Dokl. AN Uzb. SSR, No 1, 1953, pp 12-16. "Method of Double Modulation for the Investigation of Secondary Emission Under the Action of Collision by Ions."

To investigate the dynamics of secondary ionic emission a method was developed that permits one to study the time characteristics of secondary processes. A beam of ions is freed of neutral particles and is modulated with respect to intensity by an oscillator generating rectangular impulses with a frequency of 500-1,000 cps (first modulation is directed against an incandescent target); the secondary ions are gathered by a collector whose potential relative to the target is modulated by a saw-toothed oscillator of 25 cps (second modulation).

SO: Referativnyy Zhurnal--Fizika, No 2, Feb 54; (W-30785, 28 July 1954)