

ISHIN, D.P.; MATTIS, G.Ya.; ZHELTIKOVA, T.A.; PAVLENKO, F.A.;
KRYLOVA, V.I., red.; OKOLELOVA, Z.P., tekhn.red.

[Growing planting stock for shelterbelt afforestation]
Vyrashchivanie posadochnogo materiala dlia zashchitnogo
lesorazvedeniia. [By] D.P.Ishin i dr. Moskva, Sel'khoz-
izdat, 1963. 406 p. (MIRA 17:3)

PYATNITSKIY, S.S.; KOVALENKO, M.P.; LOKIMATOV, N.A.; TURKEVICH,
I.V.; STUPNIKOV, V.G.; SUSHCHENKO, V.P.; CHONI, G.P.;
KRYLOVA, V.I., red.; PEVZNER, V.I., tekhn.red.; DEYEVA,
V.M., tekhn. red.

[Vegetatively propagated forests] Vegetativnyi les. [By]
S.S.Piatnitskii i dr. Moskva, Sel'khozizdat, 1963. 447 p.
(MIRA 17:3)

KRYLOVA, V.I.

New method of measuring the specific surface of porous bodies and powders.

B. Dervagin, R. Fridlyand, and V. Krylova. Doklady Akad. Nauk S.S.S.R., 61 (4) 653-56 (1948).-----This method is based on the establishment of a Knudsen flow through the powdered substance, which is packed in a tube through which air is pulled by means of a vacuum pump. The volume speed of the air is measured by means of a rheometer; pressure drop on the substance is measured by mercury and oil manometers. The rate of flow of the gas can be varied within wide limits by means of a microvalve. Air pressure above the substance was judged by the glow in a discharge tube or an oil manometer, and pressure above 10mm. Hg, by means of an Hg manometer. Results obtained with this method are in agreement with those obtained by various existing methods (gas flow at atm. pressure, nitrogen adsorption, heat of wetting, etc.) A diagram of the apparatus is included.

B.Z.K.

CA KRYLOVA, V.I.

New methods of measurement of specific surface (in sq. cm./g.) and specific adsorption (in g./sq. cm.). I. B. V. Deryagin, V. I. Krylova, and P. M. Prilyani (Inst. Phys. Chem., Acad. Sci. U.S.S.R., Moscow). *Zhur. Fiz. Khim.* 34, 1371-82 (1960); cf. *C.A.* 43, 127.

The method utilizes the Knudsen flow of a rarefied gas through a plug of porous or nonporous disperse material the sp. surface of which has to be found. Gas-kinetic theory leads to the formula $Q = \Delta \Delta p / \Delta x$, where Q is the flow rate per unit surface of a gas experiencing a pressure drop Δp over a length Δx of material and Δ is given by $\Delta = A(2/\pi)^{1/2} (p^2/S_0 M R T)^{-1/2}$; S_0 is the sp. surface; δ is the ratio of the pore vol. to total vol. of material; M is the mol. wt. of the flowing gas; A is equal to $\pi/3$ or $24/13$ according to the elasticity or semielasticity of the gas mol. collisions with the pore walls. The theory, app., and expts. are described in detail (cf. *C.A.* 41, 2624). For nonporous adsorbents, Deryagin's method gives results in agreement with the ones given by more elaborate standard procedures. With porous adsorbents, the method which does not measure the surface of dead-end pores gives low values, e.g. silica gel: Deryagin 14.2, B.E.T. 55 sq. cm./g. A crit. expt. consists in measuring the sp. surface of a mixt. of 3 different powders of known sp. surface: the observed value (11.7) checks well with the value calcd. from the mixt. compn. (11.9). The method seems promising for routine quick detns. (soot, soils, fertilizers, etc.). Michel Bousquet

Chemical Abst.
Vol. 48 No. 9
May 10, 1954
General and Physical Chemistry

~~The effective magnitude of the spreading angle during
inhibition of porous bodies and a method for its evaluation.
H. V. Permyal, M. K. Mel'nikova, and V. L. Krylova.
Loloid J. (U.S.S.R.) 14, 450-83 (1952) (Engl. translation).
-See C.A. 47, 3082c.
H. L. H.~~

4-
3

9-2-54
EJP

ACC NR: AP6033499

SOURCE CODE: UR/0413/66/000/018/0127/0127

INVENTOR: Erglis, K. E.; Subbotin, V. T.; Krylova, V. I.

ORG: none

TITLE: Magnetic ¹⁶⁰film memory array. Class 42, No. 186202

SOURCE: Izobret prom obraz tov zn, no. 18, 1966, 127

TOPIC TAGS: ferromagnetic film, computer storage, computer memory, thin film memory, magnetic thin film

ABSTRACT: An Author Certificate has been issued for a magnetic film memory array with a metallic base and a diode-matrix two-coordinate address selection (see Fig. 1).

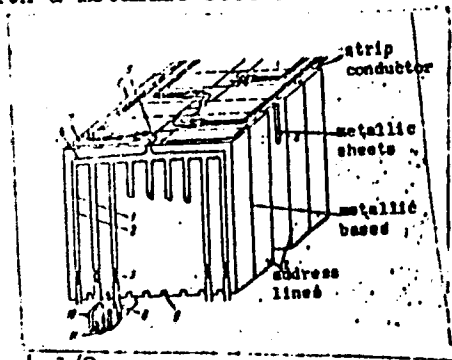


Fig. 1. Film memory array

- 1 - Metallic bases; 2 - address lines;
- 3 - decoder diodes; 4 - transverse conductor;
- 5 - output; 6 - strip conductor;
- 7 - metallic sheet; 8 - diode output;
- 9 - slots; 10 - strips; 11 - isolating lining.

Card 1/2

UDC: 681.142.07

ACC NR: AP6033899

Its bit and address lines, which are in the form of strip conductors, change the direction of magnetization of individual memory cells. The metallic sheets are connected to the magnetic film substrates, and the strip conductors are isolated from the substrates by a thin insulating layer. To assure switching current continuity, the metallic base edges on both address outputs are either interconnected by the metallic sheets serving as bases for the strip conductors or are connected to the metallic strips, both of which are tied to the pulse shapers. Orig. art. has: 1 figure.

SUB CODE: 09/ SUBM DATE: 25Feb65/

Card 2/2

ACC NR: AP6033499

SOURCE CODE: UR/0413/66/000/018/0127/0127

INVENTOR: Erglis, K. E.; Subbotin, V. T.; Krylova, V. I.

ORG: none

TITLE: Magnetic film memory array. Class 42, No. 186202

SOURCE: Izobret/prom obraz tov zn, no. 18, 1966, 127

TOPIC TAGS: ferromagnetic film, computer storage, computer memory, thin film memory, magnetic thin film

ABSTRACT: An Author Certificate has been issued for a magnetic film memory array with a metallic base and a diode-matrix two-coordinate address selection (see Fig. 1).

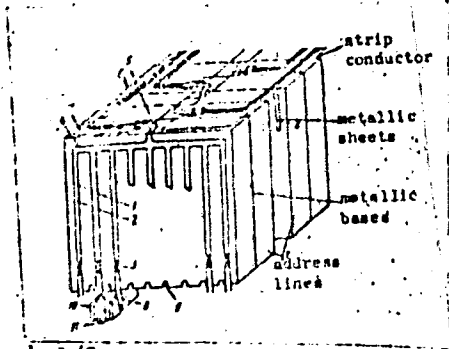


Fig. 1. Film memory array

- 1 - Metallic bases; 2 - address lines;
- 3 - decoder diodes; 4 - transverse conductor;
- 5 - output; 6 - strip conductor;
- 7 - metallic sheet; 8 - diode output;
- 9 - slots; 10 - strips; 11 - isolating lining.

Card 1/2

UDC: 681.142.07

ACC NR: AP0033/99

Its bit and address lines, which are in the form of strip conductors, change the direction of magnetization of individual memory cells. The metallic sheets are connected to the magnetic film substrates, and the strip conductors are isolated from the substrates by a thin insulating layer. To assure switching current continuity, the metallic base edges on both address outputs are either interconnected by the metallic sheets serving as bases for the strip conductors or are connected to the metallic strips, both of which are tied to the pulse shapers. Orig. art. has: 1 figure.

SUB CODE: 09/ SUBM DATE: 25Feb65/

Card 2/2

KHODYAKOVA, T.A.; AUROV, A.P.; KRYLOVA, V.I.

Chronoconductometric method for the determination of sodium polymethacrylate, its copolymer with methyl methacrylate and for the analysis of mixtures with NaOH. Zhur.anal.khim. 19 no.9:1137-1141 '64.
(MIRA 17:10)

1. Gor'kovskiy politekhnicheskiy institut imeni Zhdanova.

SERENKO, A.S., STANISLAVSKIY, Ya.M., KHAZAN, G.L., KHIZHNYAKOVA, L.N.,
OSITINSKIY, T.G., PROSEENKO, G.A., BARANENKO, A.A., MARCHENKO, N.I.
KOTSYUBENKO, V.K., NESTRUGINA, Z.F., MERUBENKO, A.B., PYHTINA, O.M.
KRYLOVA, V.K., KOCHKINA, V.H. (Khar'kov).

Hygienic working conditions and the development of pneumoconiosis
among workers in iron ore sintering plants. Gig.truda i prof.zab.
2 no.2:17-20 Mr-Ap'58. (MIRA 11:6)

1. Ukrainskiy nauchno-issledovatel'skiy institut gigiyeny truda
i profzabolevaniy.

(LUNGS--DUST DISEASES)

(IRON AND STEEL WORKERS--DISEASES AND HYGIENE)

PRIVES, M.G.; KRYLOVA, V.M.; GURKOVA, I.A.; SELIVANOVSKIY, S.A.

New method for the preparation of dry anatomical preparations of
human extremities. Arkh.anat.gist. i embr. 37 no.9:105-108 S '59.
(MIRA 13:1)

1. Kafedra normal'noy anatomii (zaveduynshchiy - prof. M.G. Prives)
I Leningradskogo meditsinskogo instituta imeni akad. I.P. Pavlova.
(EXTREMITIES anat. & histol.)

GRINBERG, A.Ye.; FRISHMAN, T.A.; PESCHANSKAYA, R.Ya.; KRYUKOVA, A.B.;
KRYLOVA, V.N.

Vulcanizing action of some derivatives of dithiocarbamic acid.
Kauch. i rez. 22 no.8:32-35 Ag '63. (MIRA 16:10)

1. Vsesoyuznyy nauchno-issledovatel'skiy konstruktorsko-tehnologicheskiy institut asbestovykh tekhnicheskikh izdeliy.

USSR/Medicine - Dysentery

FD-2323

Card 1/1 Pub 148 - 24/36

Author : Klylova, V. P.

Title : The capacity of dysentery bacilli to survive in boiled water

Periodical : Zhur. mikro. epid. i immun. No 2, 68-70, Feb 1955

Abstract : On placing dysentery bacilli into boiled water, determined the time of survival of the bacilli. Found that Sonne bacilli survive for 2-3 mos, Flexner bacilli for 1-2 mos, and Grigor'yev-Shiga bacilli up to 2 weeks. One table.

Institution : Dnepropetrovsk Institute of Epidemiology, Microbiology, and Hygiene imeni N. F. Gamaleya

Submitted : May 6, 1954

IZRALIMSKIY, A.S.; SMIRNOVA, T.V.; KRYLOVA, V.P.; LEVINSON-GOFMAN, V.O.

Excretion in children of serologically pathogenic types of Escherichia coli; author's abstract. Zhur.mikrobiol.epid. i immun. 29 no.2:110
F '58. (MIRA 11:4)

1. Iz Dnepropetrovskogo instituta epidemiologii, mikrobiologii i gigiyeny imeni Gamalei i Detskoy gorodskoy klinicheskoy bol'nitsy.
(ESCHERICHIA COLI,
excretion in child. of pathogenic strains (Rus)

KRYLOVA, V.P. (Leningrad)

Important condition for the further improvement of business
accounting. Zhel. dor. transp. 40 no.8:37-39 Ag '58.

(MIRA 11:9)

1. Nachal'nik otдела Leningradskoy gorodskoy kontory Gosbanka.
(Railroads—Accounts, bookkeeping, etc.)

MARTINKEVICH, F.S., kand.geograf.nauk; SOBOLEV, Ye.Ya., kand.geograf.nauk;
BOL'SHAKOVA, V.P., kand.ekonom.nauk; LAPETA, D.D., kand.ekonom.
nauk; GLADKIY, V.I., kand.geograf.nauk, starshiy prepodavatel';
ANICHENKO, G.V., kand.geograf.nauk; KOTT, G.Z.; TRUBILKO, N.P.,
kand.ekonom.nauk; KOROLENKO, I.K., kand.ekonom.nauk; GUTSEV, Ye.G.,
kand.geograf.nauk; CHERMENKO, V.A.; CHERMYSH, L.P.. Primalni
uchastiye: KOZLOVA, A.I.; KOVALEVSKIY, P.V.; MAZURENKO, R.V.;
KUYEYSHA, Ye.I.; KRYLOVA, V.S.; SERZHINSKIY, I.I.; KURKINA, Z.A.;
KALECHITS, T.A.; ROMANOVSKIY, N.T., red.; KOSTEVICH, K.R., red.;
TURTSEVICH, L., red.isd-va; SIDERKO, N., tekhn.red.

[Distribution of the industry of White Russia for the processing
of agricultural raw materials] Razmeshchenie promyshlennosti BSSR
pe pererabotke sel'skokhoziaistvennogo syr'ia. Minsk, 1959. 193 p.
(MIRA 13:6)

1. Akademiya nauk BSSR, Minsk. Institut ekonomiki. 2. Zaveduyu-
shchiy sektorom razmeshcheniya proizvodstva Instituta ekonomiki
Akademii nauk BSSR (for Martinkevich). 3. Institut narodnogo
khozyaystva im. V.V.Kuybysheva (for Gladkiy).

(White Russia--Industries, Location of)

lh528
S/831/62/000/010/008/013
EO32/E314

9.9812
AUTHOR: Krylova, V.S.

TITLE: "Forbidden" times for the commencement of ionospheric disturbances at middle latitudes of the western hemisphere

SOURCE: Ionosfernyye issledovaniya. Sbornik statey, no. 10. V razdel programmy MGG (ionosfera) Mezhduv. geofiz. kom. AN SSSR. Moscow, Izd-vo. AN SSSR, 1962. 67 - 72

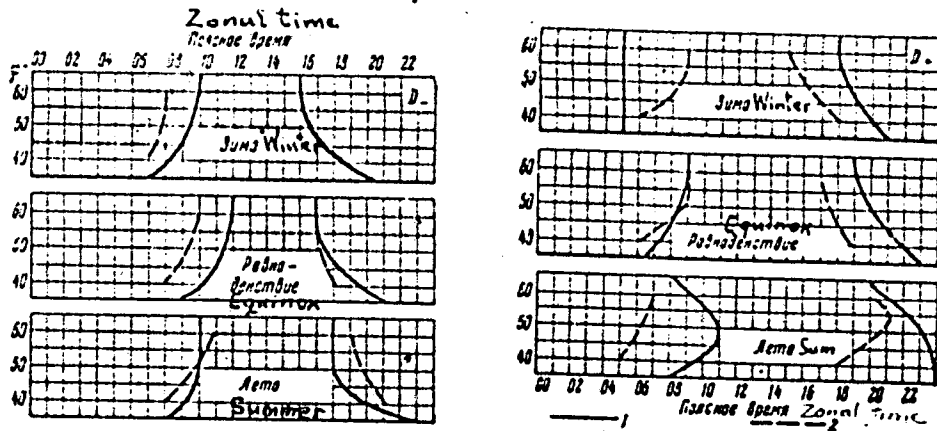
TEXT: Diurnal, seasonal and latitude distributions of ionospheric-disturbance commencements at middle latitudes in the western hemisphere are reviewed on the basis of hourly values of f_oF_2 and f -graphs for five ionospheric stations at latitudes between $38-61^\circ$ N and two stations in the eastern hemisphere, for July, 1957 to July, 1958. Altogether about 30 000 hourly values were used. The results of the analysis for negative and positive disturbances are indicated in Fig. 3 (solid lines - 1957-1958; broken lines - 1948-1949). The central regions on these plots, bounded by the curves, represent the "forbidden" periods for the commencement of ionospheric disturbances at different latitudes
Card 1/2

S/851/62/000/010/008/015
E032/E314

"Forbidden" times for

(the zonal time is plotted along the horizontal axes). Comparison of curves 1 and 2 shows that as the solar activity increases, there is an increase in the duration of the forbidden periods for negative disturbances, while the opposite occurs for positive disturbances. There are 3 figures and 2 tables.

Fig. 3:



Card 2/2

KRYLOVA, Vera Semnovna; POLYAKOVA, V., redaktor; IGNAT'YEVA, A..
tekhnicheskii zhurnal

[Advice for milkmaids] Sovety doiarke. [Moskva] Moskovskii rabochii,
1956. 93 p. (MIRA 10:3)
(Milking)

KRYLOVA, V. S.

USSR/Farm Animals - Cattle.

Q-3

Abs Jour : Ref Zhur - Biol., No 1, 1958, 2574

Author : V.S. Krylova, Ye.A. Petukhova

Inst : -

Title : The Use of Malt-Grains as Feed Should be Well Regulated.

Orig Pub : Nauka 1 ; redov. opyt v s-kh. 1957, No 2, 22-24

Abstract : On the basis of observations, and the analysis of feeds provided for cows in the Kashir rayon of the Moscow oblast', it was established that a daily administration of 4-6 pails of malt grain to an animal may produce deviations from a normal mineral metabolism.

Card 1/1

KRYLOVA, V.S.

"Origin and transformation of domestic animals" by S.N. Bogoliubskii.
Reviewed by V.S. Krylova. Izv. AN SSSR. Ser. biol. no. 2:334-335
Mr.-Ap '61. (MIRA 14:3)
(DOMESTICATION) (BOGOLIUBSKII, S.N.)

KRYLOVA, Vera Semenovna, kand. sel'khoz. nauk PETUKHOVA, Yekaterina
Aleksandrovna, kand. sel'khoz. nauk; YEMELINA, Nina Trofimovna,
kand. sel'khoz. nauk; POLYAKOVA, V., red.; PAVLOVA, S., tekhn.
red.

[Vitamins in the feeding of farm animals and poultry] Vitaminy v
kormlenii sel'skokhoziaistvennykh zhivotnykh i ptitsy. Moskva,
Mosk. rabochii, 1962. 93 p. (MIRA 15:6)
(Vitamins) (Feeding)

KRYLOVA, V. S.

42754. KRYLOVA, V. S. Kharakteristika Svezhego Vtorichnogo Sifilisa V Gody Voiny. Sbornik Trudov Kliniki Kozhnykh i Vener. Bolesney (Kazan. Gos. Med. In-t). Kazan', 1948, s. 124-27.

SO: Letopis' Zhurnal'nykh Statey, Vol. 7, 1949

KEYLOVA, V. S.

42753. KEYLOVA, V. S. Lecheniye Straptodermiy Kraasnyy Straptetsidov. Sbornik Trudov Kliniki Kosmnykh i Vener Bolezney (Kazan. Soc. Med. In-t). Kazan, 1948, s. 97-100.

SO: Letopis' Zhurnal'nykh Statey, Vol. 7, 1949

KRYLOVA, V. S. --

"Variations of the Complement Titer of the Blood Serum of Pyodermic Patients." Card Med Sci, Kazan State Medical Inst, Kazan, 1953.
(RZhBiol, No 2, Sep 54)

Survey of Scientific and Technical Dissertations Defended at USSR
Higher Educational Institutions (10)

SO: Sum. No. 481, 5 May 55

KRYLOVA, V.S. (Kazan')

Prognostic significance of complement titer in the blood serum
in pyodermas. *Russ. med. zhur.* no.5:74 S-O '61. (MIHA 15:3)
(SKIN--DISEASES)
(COMPLEMENT FIXATION)

IVANOVA, A.I.; KUTUKOV, S.S.; KRYLOVA, V.V.

Expand the set of transparent silicate colors used for decorating
glassware. Leg. prom. 18 no.9:48-49 S '58. (MIRA 11:10)
(Glass painting and staining)

KOLESNIKOV, S.M., kand.biol.nauk; KRYLOVA, V.V., nauchnyy sotrudnik

Recent developments in the technique of vegetative hybridization of herbaceous plants. Trudy Kish. sel'khoz. inst. 3:217-236 '55.
(Grafting) (Hybridisation, Vegetable) (MIRA 11:7)

SHIROKOV, N.V., kandidat khimicheskikh nauk; SINITSYN, K.D., inzhener;
TSIRANOVA, V.D., inzhener; KRYLOVA, Y.Y., inzhener; SMELOVA, Z.A.

Continuous mechanised method for the production of sausage casings
from paper. Trudy VNIIMS no.6:5-9 '54. (MLRA 10:8)
(Sausage casings)

LAVROVA, L., kandidat tekhnicheskikh nauk; VECHKANOV, K., inzhener; KRYLOVA,
V., inzhener.

Continuous brine producer. Mias. ind. SSSR 28 no.3:9-11 '57.

(MLRA 10:6)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut myasnoy pro-
myshlennosti.

(Brines)

(Meat industry--Equipment and supplies)

КРЫЛОВА, В.

KRYLOVA, V., inzh.; DUBROVINA, L., inzh.

Rapid method for making sausages (from "Food in Canada" no.4, 1957). Mas.
ind. SSSR 28 no.5:63 '57. (MIRA 11:1)

(Sausages)

KRYLOVA, V.

LAVROVA, L., kand.tekhn.nauk; VOLOVINSKAYA, V., kand.tekhn.nauk;
DYKLOP, V., kand.biol.nauk; KRYLOVA, V.; MERKULOVA, V.

Comminuting meat. Mias. ind. SSSR 29 no.1:11-14 '58.

(MIRA 11:3)

1.Vsesoyuznyy nauchno-issledovatel'skiy institut myasnoy promysh-
lennosti.

(Sausages)

LAVROVA, L., kand. tekhn. nauk; KRYLOVA, V., inzh.; POLETAYEV, G.

Innovations in the production of dry smoked sausage. Mias. ind.
SSSR 29 no.6:18-19 '58. (MIRA 11:12)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut myasnoy promyshlennosti.

(Sausages)

LAVROVA, L.P., kand.tekhn.nauk; VOLOVINSKAYA, V.P.; KRAVCHENKO, N.D.,
starshiy nauchnyy sotrudnik; LEVINA, L.I., starshiy nauchnyy
sotrudnik; CHIRYATNIK, V.I., starshiy nauchnyy sotrudnik;
KONAREVSKIY, A.A., starshiy nauchnyy sotrudnik; KRYLOVA, V.V.;
mladshiy nauchnyy sotrudnik; TELEPNEVA, V.P., mladshiy nauchnyy
sotrudnik; MATYTSIN, N.N., inzh.; MALYUTIN, P.I., inzh.

Developing a continuous mechanized preparation of sausage meat
used in the production of cooked sausages. Trudy VNIIMP no.9:
13-39 '59. (MIRA 13:8)

1. Moskovskiy mysokombinat (for Matytsin and Malyutin).
(Sausages)

VOLOVINSKAYA, V.P., kand.tekhn.nauk; SOLOV'YEV, V.I., kand.khim.nauk;
RUBASHKINA, S.Sh., starshiy nauchnyy sotrudnik; KRYLOVA, V.V.,
mladshiy nauchnyy sotrudnik.

Intensification of the method of aging meat in brine for producing
semismoked sausages. Trudy VNIIMP no.9:40-49 '59. (MIRA 13:8)
(Sausages)

LAVKOVA, L.I., kand. tekhn. nauk; KUKHARKOVA, L.I., starshiy nauchnyy sotrudnik; SOLOV'YEV, V.I., kand. khim. nauk; IL'YASHENKO, M.A., kand. veterin. nauk; KRYLOVA, V.V., starshiy nauchnyy sotrudnik; VOLKOVA, A.G., mladshiy nauchnyy sotrudnik; KUZNETSOVA, G.N., mladshiy nauchnyy sotrudnik; POLETAYEV, T.N., mladshiy nauchnyy sotrudnik

Intensification of technological processes in the production of hard smoked sausages. Trudy VNIIMP no.11:57-75 '62.

(MIRA 18:2)

KUKHARKOVA, L.L., starshiy nauchnyy sotrudnik; LAVROVA, L.P., kand. tekhn. nauk; SOLOV'YEV, V.I., kand. khim. nauk; FREYDLIN, Ye.M., kand. veter. nauk; PEROVA, P.V., kand. veter. nauk; SADIKOVA, I.A., kand. biol. nauk; KRYLOVA, V.V., starshiy nauchnyy sotrudnik; BUSHKOVA, L.A., starshiy nauchnyy sotrudnik; RYNDINA, V.P., starshiy nauchnyy sotrudnik; TRUDOLYUBOVA, G.B., starshiy nauchnyy sotrudnik; KARGAL'TSEV, I.I., assistent; MIKHAYLOVA, A.Ye., mladshiy nauchnyy sotrudnik; KARPOVA, V.I., mladshiy nauchnyy sotrudnik; POLETAYEV, T.N., mladshiy nauchnyy sotrudnik; MERKULOVA, V.K., mladshiy nauchnyy sotrudnik

Directed use of microorganisms for the improvement of the quality of sausage products. Report No. 1. Trudy VNIIMP no.16: 64-75 '64. (MIRA 18:11)

1. Kafedra tekhnologii Moskovskogo tekhnologicheskogo instituta myasnoy i molochnoy promyshlennosti (for Kargal'tsev).

SOLOV'YEV, V.I., kand. khim. nauk; LAVROVA, I.P., kand. tekhn. nauk;
SADIKOVA, I.A., kand. biol. nauk; KRYLOVA, V.V., starshiy
nauchnyy sotrudnik; BUSHKOVA, L.A., starshiy nauchnyy sotrudnik;
MERKULOVA, V.K., mladshiy nauchnyy sotrudnik; POLETAYEV, T.N.,
mladshiy nauchnyy sotrudnik; KARP'OVA, V.P., inzh.-khimik;
MAMAYEVA, S.A., tekhnik

Studying some conditions providing for color intensity and
stability in the production of smoked and cooked sausage.
Trudy VNIIMP no.16:183-201 '64. (MIRA 18:11)

KUKHARKOVA, L.L., starshiy nauchnyy sotrudnik; LAVROVA, L.P., kand.
tekh. nauk; SOLOV'YEV, V.I., kand. khim. nauk; FREYDLIN, Ye.M.,
kand. veter. nauk; PEROVA, P.V., kand. veter. nauk; SADIKOVA,
I.A., kand. biol. nauk; KRYLOVA, V.V., starshiy nauchnyy
sotrudnik; BUSHKOVA, L.A., starshiy nauchnyy sotrudnik;
RYNDINA, V.P., starshiy nauchnyy sotrudnik

Directed use of microorganisms for the improvement of the
quality of sausage products. Report No. 2. Trudy VNIIMP no.16:
76-109 '64. (MIRA 18:11)

GLAZUNOV, I.S.; ARONOV, D.M.; DROMBIAN, Y.G.; KRYLOVA, E.A.

Ischaemic heart disease and occupation. *Cor Vasa* 6 no.4:
274-280 '64.

1. Institute of Therapy, Academy of Medical Science, Moscow,
U.S.S.R.

KRYLOVA, Ye.G., mladshiy nauchnyy sotrudnik

Training of the young child in the family. Med. sestra 19 no.3:
34:38 Nr '60. (MIRA 13:5)

1. Iz Instituta pediatrii Akademii meditsinskikh nauk SSSR,
Moskva.

(CHILDREN--MANAGEMENT)

KRYLOVA, Ye.K.

Graphic methods of representing the characteristics of strata of
frozen rocks. Trudy Inst.merz1.AN SSSR 16:160-171 '60.
(MIRA 13:4)

(Frozen ground--Maps)

KRYLOVA, Ye.H., meditsinskaya sestra (Moskva)

**Management of the therapeutic and preventive regimen in hospitals
for infants.. Med.sestra 15 no.3:26-28 Mr '56. (MLRA 9:6)
(PEDIATRIC NURSING)**

KRYLOVA, Ye. N., Cand Med Sci (diss) -- "The use of penicillin in epidemic cerebrospinal meningitis (Experimental-clinical investigation)". Saratov, 1960. 14 pp (Min Health RSFSR, Saratov State Med Inst), 200 copies (KI, No 10, 1960, 136)

KLIMENKO, N.M.; KRYLOVA, Ye.N.; MIKHALEVA, N.M.; CHURIKOV, Yu.I.; DYATKINA, M.Ye.

Computation of dicentric Coulomb integrals including 3d-, 4s-, and 4p orbitals. Zhur. struk. khim. 6 no.3:407-421 My-Je '65.

(MIRA 18:8)

1. Institut obshchey i neorganicheskoy khimii imeni N.S.Kurnakova
AN SSSR i Moskovskiy institut tonkoy khimicheskoy tekhnologii imeni
M.V.Lomonosova.

VORONIN, N. L.; SLESAREVICH, V. V.; KRYLOVA, Ye. S.

Cand. Technical Sci.

"Investigation and technological characteristics of Andalusitic rocks"

Ogneupory, No. 12, 1949

C#

5

Analysis of decay curves of phosphor powders. V. V. Antonov-Romanovskii and K. A. Kryzha. *Zhur. Khim. Fiz.* 19, 63-73 (1949).—The proportionality between the initial brightness I_0 and the intensity of excitation K , over a range of 10³ fold variation K , remains valid for a layer of ZnS + Cu in the form of powder. This indicates that the linear relation $I_0 = aK$ holds also within each individual grain. In the same range of variation of K , the total light stored, n_0 , in a thick (10³ mm.) layer of powder, is proportional to \sqrt{K} at lower K , but increases progressively slower than \sqrt{K} as K increases. In thin layer, the proportionality $n_0 = b\sqrt{K}$ holds only at the very lowest K , and deviation begins at a very early point. That in a thicker layer this occurs only at substantially higher K , is due to the fact that the light reaching deeper layers is considerably weakened. At low K , the relation $I_0 = p_0 K$, where $p_0 = a/M$, characteristic of the bimol. recombination process, remains valid for the powder. However, the kinetic decay curve, I as a function of time t , is not a simple 2nd-order hyperbola, but follows, empirically, a law $I = (a + bt)^{-\alpha}$, where $\alpha < 1.5$. This does not, however, contradict the validity of the 2nd-order hyperbolic decay law for each

ith elementary vol. of the powder. Even if the law does hold for each elementary vol., the overall law, $I = p_0 a_0 K (1 + p_0 a_0 t)^{-1}$, may be different from a 2nd-order hyperbola. The expl. confirmation thereof is provided by the fact that a change of K from K_0 to K_1 shifts the decay curve along the axis of ordinates by $\Delta \log I = \log(K_1/K_0)$, and along the axis of abscissas by $\Delta \log t = -0.5 \log(K_1/K_0)$, i.e. $\Delta \log I = -2.5 \log t$. The simple bimol. scheme ceases to be valid at strong K . The rapid slowing down of the increase of n_0 with further increasing K indicates in the absence of quenching or saturation, an increase with K of the recombination probability p , and its decrease with time to a const. p_0 . With p variable, the law of decay for an elementary vol. is no more a 2nd-order hyperbola, but follows $I = p_0 [1 + a_0 \int p(t) dt]^{-1}$. In a general way, relations found with powders may, but need not necessarily, reflect laws valid for an individual elementary microvol. If one excludes improbable or coincidental compensations, this will be the case only when the property considered is additive. Identification of an overall decay law observed on a powder, with the true decay law, may be misleading. N. Thon

PA 30/49 192

Jan 49

USSR/Physics
Phosphors
Luminescence

"An Analysis of Extinguishing Curves for Powderly Phosphors," V. V. Antonov-Romanovskiy, Ye. S. Krylova, Phys Inst imeni P. N. Lebedev, Acad Sci USSR, 104 pp

"Zhur Eksper i Teoret Fiz" Vol XII, No 1

Shows that in a weakly activated ZnS + Cu phosphor the brightness of luminescence of elementary volume decreases according to a second order hyperbola. This is proved by considering one invariant property of the shape of the extinguishing curve which occurs if the luminescence

30/49592

USSR/Physics (Contd)

Jan 49

process follows the simple bimolecular reaction scheme. Submitted 14 Jul 48.

KRYLOVA, YE. S.

30/49592

KRYLOVA, YE. S.

PA 27/49T96

USSR/Physics
Luminescence
Phosphors

Feb 49

"Growth of Luminescence in the Phosphor ZnS · Cu, Co," Ye. S. Krylova, Phys Inst imeni P. N. Lebedev, Acad Sci USSR, 4 pp

"Dok Ak Nauk SSSR" Vol LXIV, No 4

This is another in series of studies on initial stages of luminescence. Concludes that initial quadratic growth in intensity with the time of excitation is, in itself, direct proof of the bimolecular and, consequently, recombination mechanism of phosphorescence. Submitted 8 Dec 48.

27/49T96

CA

3

Mechanism of the luminescence of zinc phosphors in weak excitation. K. S. Krylova (P. N. Lebedev Phys. Inst., Acad. Sci. U.S.S.R., Moscow). *Zhur. Eksp. Teoret. Fiz.* 20, 903-18(1950).—The most convincing proof of the recombination character of the luminescence of many phosphors is the proportionality between the initial brightness I_0 and the square of the intensity of excitation K found for ZnS:Cu (Levshin, *Acta physicochim.* 5, 301 (1936); Antonov-Romanovskii, *C.A.* 30, 688(19) and for CaS:Sm (L. and Rikhsan, *C.I.* 13, 388(19) in very short excitation (with high K). This establishes the bimol. law of the initial decay, and rules out a unimol. law which calls for a direct proportionality between I_0 and E . This indicates ionization of luminescence centers as the primary act of excitation, and recombination of the photoelectrons with ionized centers as the mechanism of emission. Conditions for a bimol. course of emission are fulfilled under high E where a large no. of ionization centers are produced within the "radius of action" of an electron, and the electron can recombine with any of them. At low E , where ionized centers are far apart (the assumption that an electron can recombine at any distance from its point of production in the

crystal is denied), the electron is most likely to recombine with its own ionization centers, a condition favorable to a unimol. course. Moreover, if the electron is assumed to be able to diffuse away from its own center, chances of a bimol. process will increase with time; consequently, a pure unimol. course is more likely to hold with shorter times of excitation. Further confirmation of these views, in addition to previously investigated KCl:Ti (C.A. 37, 2856(19) and 3148(19), was obtained on 2 types of ZnS phosphors. The I_0 's were obtained by extrapolation to zero time of the exptl. plot of the momentary $I^{-1/2}$ vs. time t . With bimol. decay the relation is $I^{-1/2} = p^{-1/2}n_0^{-1/2} + p^{1/2}t$ (where n_0 = total light stored and the const. p is defined by $I = I_0(1 + pnd)^{-1}$, $I_0 = pn_0^2$), and in the unimol. case, approx. $I^{-1/2} = an_0^{-1/2} + bn_0^{-1/2}t$ (by development of the exponential). I_0 measured directly for ZnS:Cu,Co coincided with the extrapolated value. Exptl. plots of $I^{-1/2}$ vs. t for a ZnS:Zn phosphor at room temp., with a short time of excitation (0.1 sec.) and a five-fold variation in E , leave no doubt

about the bimol. nature of the decay. At -90° , $I_t^{-1/2}$, extrapolated to $I = 0$, lies between the bimol. and unimol. values, and approaches closer to the latter as E is reduced. Also, with decreasing E , the straight lines deviate increasingly from parallelism and spread out fan-wise. Another sample of ZnS:Zn showed deviations from bimolecularity even at room temp. in excitation with an incandescent lamp, but not with 365 $m\mu$. The ZnS:Cu,Co phosphor showed a predominant unimol. course at room temp. in excitation with an incandescent lamp. At const. E with variation of the time of excitation θ (0.3-2.0 sec.), in monochromatic excitation with 365 $m\mu$, transition from unimol. to bimol. kinetics is observed at room temp. in the range $\theta \sim 0.3-0.8$ sec. This corresponds to the expl. curve of growth of I with θ , which is linear at short θ , increasingly going over into a quadratic relation with increasing θ . With E reduced by a factor of 10, the transition from bimol. to unimol. occurs at correspondingly greater $\theta \sim 10-20$ sec. In weaker excitation with 436 $m\mu$, the linearity, hence unimolecularity, extends as far as $\theta \sim 40$ sec. In 365 $m\mu$, the time of the unimol.-bimol. transition varies inversely as E , i.e. transition occurs at equal values of the total light stored. This is not valid for excitation with 302 $m\mu$, where the linear portion is practically absent; at this wave length, absorption takes place mainly in the host substance. The mean range \bar{w} of expulsion of an electron from its ionization

center, on excitation, is related to the crit. concn. n_c of ionization centers by $\bar{w} \sim n_c^{-1/2}$, where n_c is that concn. at which \bar{w} becomes comparable to the mean distance between centers. The order of magnitude of n_c is estd. from the transition unimol.-bimol., with the thickness of the surface layer corresponding to storage of half the total light supplied taken as the effective thickness. In units of a (lattice const. of ZnS, $a = 5.4 \times 10^{-8}$ cm.), the so roughly estd. \bar{w} are, ZnS:Zn (490 $m\mu$) 210, ZnS:Cu, Co (436 $m\mu$) 130, and ZnS:Cu,Co (365 $m\mu$) 100, as compared with $\bar{w} \sim 20a$ for KCl:Tl. In the latter in contrast to ZnS phosphors, initially unimol. decay was observed in instantaneous excitation even at low E . In all these instances, existence of a range of unimol. decay means that the electron, escaped from its trap, recombines preferably with its own ionization center. More broadly, in contradiction with the prevalent quantum-mech. picture of semiconductors (Bloch, Wilson), a thermal electron cannot be conceived as belonging to the crystal as a whole, but only to a certain region, i.e., there is room for the concepts of "own" and "foreign," and of "near" and "far" ionization centers. The ZnS lattice cannot be considered rigid towards the thermal electron which is able to displace near ions in its diffusion through the lattice. Except for the fact that KCl:Tl shows also a short-lived emission ($< 5 \times 10^{-9}$ sec.), which is absent in the ZnS phosphors, the kinetics are analogous, with only the quantitative difference that in the latter transition to the unimol. course occurs at lower n than in KCl:Tl.

N. Tshon

KRYLOVA, YE. S.

PA 169195

• USSR/Physics - Phosphors

Oct 50

"Investigating the Mechanism of Illumination of Zinc Phosphors for Weak Excitation," Ye. S. Krylova, Phys Inst imeni Lebedev, Acad Sci USSR

"Zhur Eksper i Teoret Fiz" Vol XX, No 10, pp 905-918

During momentary excitation by light of weak intensity, recombination illumination of ZnS - Zn and ZnS - Cu, Co phosphors follows monomolecular scheme. Magnitude of ejection of electrons from illumination centers during excitation is about 100 times the constants of the lattice. Submitted 26 Mar 50.

169195

De la ...

the ... Na ... Be ... Mg ...
thermographer and ...
...

is the main ... II ...
...

1848. 1852-7 -- A review of documents from
the period 1852-7.

SHAMRAY, P.I.; MIKHEYEVA, V.I.; KRYLOVA, Ye.Ya.

Preparation of amorphous boron of high purity. Part 3: Refining
amorphous boron. Zhur.neorg.khim. 2 no.6;1242-1247 Je '57.
(MIRA 10:10)

(Boron)

АНАЛИЗ 10

*MIKHEYEVA, V.I.; SHAMRAY, F.I.; KRYLOVA, Ye.Ya.

Preparation of amorphous boron of high purity. Part 4: Evaluating
the quality of amorphous boron. Zhur.neorg.khim. 2 no.6:1248-1253
Je '57. (MIRA 10:10)

(Boron)

KRYLOVA, YE. Y.

180)

Abstracts with R.M. Zvezdina metallurgy 007/1996

Development, metallurgy, zinc-lead metallurgy
 (Dobryshin, Metallurgy, Zinc-lead Metallurgy, Study of Metals, and Physicochemical Methods of Investigation)
 Moscow, Izdat. M. S. 205 p. (Series: No. 2707, 1978. 3) Mir Press 019
 1978. 205 p. Series: Metallurgy; M. of Publishing House A.S. Gostizdat
 Technical journal of the metallurgical industry.

Comments: This volume of the study (transmission) of the Institute Metallurgical
 Institute on metallurgy, industrial metals and all A.S. Gostizdat) contains 2
 studies on the metallurgy, the properties of the metals, and physicochemical
 along, discussion in articles, resulting of metals due to corrosion, etc.

200 1/8

ability of metals in various temperatures, systems for measuring
 chemical reactions and for determining the melting points of alloys and
 alloys, optical spectral analysis, quantitative determinations by the
 method, and aging of alloys. Much study is accompanied by

TABLE OF CONTENTS:

007/1996

Metallurgy, Study of Metals (Cont.)

Indovina, S.A., and R.I. Zhuravleva. Study of the Methods of Ligatures and of
 Alloys from Solid Solutions in the Aluminous - Magnesium - Aluminum
 System 206

Shenoy, V.S., and V.K. Deyanov. On the Simultaneous Solubility of Iron
 and Silicon in Magnesium in BCCII Phase at Various Temperatures 201

Shenoy, V.S., and V.K. Deyanov. On the Aging of Alloys of the Mg-Si-Fe
 System in the AQUEOUS-THIOLIN Region 208

Shenoy, V.S. Effect of Corrosive Media on the Susceptibility of Magnesium
 Alloys to Corrosion Cracking 203

Dilgala, I.B., and A.Y. Rimskiyev. Determination of Corrosion Density in
 Building Iron Spots 200

Shenoy, V.S., and R.P. Zolotarev. Effect of Potentiostatic Process in
 Semi-crystalline Cobalt Sulfide 202

Cont 2/8

SHAMRAY, F.I.; KHYLOVA, Ye.Ya.

Mutual solubility of zinc and lithium in magnesium, in the solid state
at various temperatures. Trudy Inst.met. no.3:231-237 '58.

(MIRA 12:3)

(Solutions, Solid) (Systems (Chemistry))

SHAMRAY, F.I.; KNYLOVA, Ye.Ye.

Aging of Mg - Zn - Li system alloys on an α -phase base. Trudy Inst.met.
no.3:238-244 '58. (MIRA 12:3)
(Magnesium-zinc-lithium alloys) (Phase rule and equilibrium)
(Metals, Effect of temperature on)

85637

18.1245

S/509/60/000/004/017/024
E021/E106

AUTHORS: Shamray, F.I., and Krylova, Ye. Ya.

TITLE: The Mutual Solubility of Zinc and Lithium in the β -Phase of the Mg—Zn—Li System in the Solid State

PERIODICAL: Akademiya nauk SSSR. Institut metallurgii. Trudy, No. 4, 1960. Metallurgiya, metallovedeniye, fiziko-khimicheskiye metody issledovaniya, pp.200-207

TEXT: The solubility of zinc and lithium was investigated in five sections:

I	Mg:Li = 71:29	Zn:Li = 4:1
II	Mg:Li = 71:29	Zn:Li = 3:2
III	Mg:Li = 69:31	Zn:Li = 1:1
IV	Mg:Li = 67:33	Zn:Li = 2:3
V	Mg:Li = 67:33	Zn:Li = 17:83

98.95% Li, 99.99% Zn and 99.91% Mg were used. The main method of investigation was by microstructural analysis. In section I, the limiting solubility in the β -phase by microstructural analysis corresponded to 375 °C and 16.8 weight % zinc. At 330 °C, 13.5% zinc goes into solution, at 300 °C about 11%.

Card 1/ 2

VX

69637

S/509/60/000/004/017/024
E021/E106

The Mutual Solubility of Zinc and Lithium in the β -phase of the Mg—Zn—Li System in the Solid State

and at 250 °C about 7%. The hardness increased with increase in zinc up to 16.8% and then remained constant.

In section II the limiting solubility from microstructural analysis corresponded to 370 °C and 17% zinc. The solubility at 350, 330, 290, 250 and 150 °C was 16, 14, 10.5, 7.5 and 2.4 weight % zinc respectively. The hardness of alloys in this section increased to 16.8% zinc and then remained constant.

In section III microstructural analysis showed that the limiting solubility corresponded to 380 °C and 19 weight % zinc. At 350, 250 and 150 °C, the solubility was 17, 6.7 and 2% zinc, respectively. The hardness increased up to 18.4% zinc.

In section IV the microstructural analysis showed that the limiting solubility corresponded to 385 °C and 19.27 weight % zinc. The solubility at 350 and 300 °C was about 17 and 15% zinc.

In section V the limiting solubility corresponded to 320 °C and 18 weight % zinc.

There are 2 figures and 2 tables.

Card 2/2

89638

18.1245

S/509/60/000/004/018/024
E021/E106

AUTHORS: Shamray, F.I., and Krylova, Ye.Ya.

TITLE: Ageing of Alloys of the β -Phase in the Mg—Zn—Li System

PERIODICAL: Akademiya nauk SSSR. Institut metallurgii. Trudy, No. 4, 1960. Metallurgiya, metallovedeniye, fiziko-khimicheskiye metody issledovaniya. pp.208-213

TEXT: Ageing was studied at 125, 100, 75°C and room temperature, using the following sections.

- | | | |
|-----|---------------|---------------|
| I | Mg:Li = 71:29 | Zn:Li = 4:1 |
| II | Mg:Li = 71:29 | Zn:Li = 3:2 |
| III | Mg:Li = 69:31 | Zn:Li = 1:1 |
| IV | Mg:Li = 67:33 | Zn:Li = 2:3 |
| V | Mg:Li = 67:33 | Zn:Li = 17:83 |

At 125 °C there was a particularly marked increase in the hardness of the alloy from section I containing 16.6% zinc and 9.07% lithium. After 3.15 hours an increase of 15 units on the Rockwell C scale was observed. Alloys from this section containing 3.31, 6.49 or 9.53% zinc aged to a lesser degree and more slowly.

Card 1/3

X

89638

S/509/60/000/004/018/024
E021/E106

Ageing of Alloys of the β -Phase in the Mg-Zn-Li System

A similar ageing process was observed in sections II, III and IV. In section II a maximum increase in hardness was observed with the alloy containing 15.43% zinc and 9.84% lithium after 3.15 hours. At 100 °C all the alloys were susceptible to ageing. The character of ageing was similar to that observed at 125 °C. Alloys from sections I and III aged to a greater degree than the others. In section I, the maximum increase in hardness was 9 units for the alloy containing 12.47% zinc and 9.41% lithium after one hour. At 70 °C all the alloys aged to a lesser degree than at the higher temperatures. The alloys of the last two sections gave a maximum increase of hardness of 4 units. Natural ageing at room temperature was carried out for 30 days. Alloys of all the sections aged very slowly and the maximum increase in hardness was 4 - 7 units after 3 - 5 days. Ageing practically ceased after 10 days. The corrosion resistance of the alloys was also tested by immersion in a 5% solution of common salt. Alloys of sections I and II containing 12.67 and 16.6% zinc had low resistance (weight loss of 41 and 17.26 mg/cm²)

Card 2/3

X

89638

S/509/60/000/004/018/024
E021/E106

Ageing of Alloys of the β -Phase in the Mg—Zn—Li System
per day). Alloys of sections V and III containing 3.31, 6.49
and 6.67% zinc were relatively resistant (1.84, 4.15 and 6.91
mg/cm² weight loss per day), but had lower hardness figures.
Alloys of section IV containing 10.08% zinc had good resistance
(6.31 mg/cm² per day) and medium hardness. The lithium used
in the investigations contained 0.5% sodium and 0.2% potassium
which may have affected the properties.
There are 1 figure and 1 table.

X

Card 3/3

SMELOV, N.S.; YEGOROV, G.I.; KOKOLIN, A.I.; KSAFOPULO, P.I.; RAKHMANOVA, N.V.;
KRYLOVA, Ye.Ye.; RYKOVA, L.K.; PER, M.I.; PETRUSHEVSKIY, S.I.; PUSTOVAYA,
A.I.; TUNGSKOVA, A.I.; VELICHKO, Ye.V.; PLAVIT, P.Ya.; GOL'DENBERG, M.M.

Evaluation of results of the treatment of early syphilis according
to 1949 scheme. Vest. vener., Moskva No.1:29-33 Jan-Feb 52. (CIML 21:4)

1. Professor for Smelov and Per. 2. Central Skin-Venerological Institute
(Director--N.M. Turanov) for Smelov, Yegorov, Sokolin, Ksanfopulo,
Rakhmanova, Krylova and Rykov; Hospital imeni Korolenko (Head Physician
Docent V.P. Volkov) for Per, Petrushevskiy; First Venerological Dis-
pensary (Head Physician--K.A. Vinogradova) for Pustovaya and Tunguskova);
Second Venerological Dispensary (Head Physician--V.G. Bronshteyn) for
Velichko, Plavit and Gol'denberg.

SHROB, A. M.; KRYLOVA, Yu. I.; ANTONOV, V. K.; SHEMYAKIN, M. M.

Enolization of N-acylamides. Izv AN SSSR Ser Khim no. 4:774
Ap '64. (MIRA 17:5)

1. Institut khimii prirodnykh soyedineniy AN SSSR.

SHKROB, A.M.; KRYLOVA, Yu.I.; ANTONOV, V.K.; SHEMYAKIN, M.M.

Activation of the amide group by N-acylation. Part 4: Formation
and conversions of aromatic cyclols. Zhur. ob. khim. 35 no.8:
1389-1398 Ag '65. (MIRA 18:8)

1. Institut khimii prirodnykh soedineniy AN SSSR.

KRYLOVA, Z.A.; TROFIMOVA, A.V.

Transition of acute dysentery into a chronic form in children.
Pediatria 39 no.3:37-39 My-Je '56. (MLM 9:9)

1. Iz detskogo otdeleniya Doroshnoy bol'nitsy st. Kuybyshev (glavnyy vrach P.A.Filekin)
(DYSENTERY, in inf. and child
transition of acute form into chronic)

BORISHANSKIY, L.S.; KRYLOVA, Z.A.

Calculating the distribution of salinity in the Aral Sea. Trudy
GOIN no.77:27-38 '64. (MIRA 18:1)

AUTHORS: Kasatkina, L. A., Boreskov, G. K., Krylova, Z. L.,
Popovskiy, V. V. 153-58-1-3/29

TITLE: Investigation on the Mobility of Oxygen in Vanadium-Pentoxide
by Means of the Isotope-Exchange Method (Issledovaniye
podvizhnosti kisloroda pyatiokisi vanadiya metodom izotopnogo
obmena)

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy Khimiya i khimiches-
kaya tekhnologiya, 1958, Nr 1, pp. 12 - 19 (USSR)

ABSTRACT: Vanadium pentoxide forms the active component of many oxi-
dizing catalysts (vanadium contact-masses with the production
of H₂SO₄, catalysts of the naphthalene-, anthracene-oxidation
and of other production). It was interesting to compare the
catalytical activity of V₂O₅ and the readiness of the ex-
change of its oxygen against the molecular-oxygen and the
steam. A survey of the publications (References 1 to 4)
dealing with this problem is given. It is followed by an ex-
perimental part with the description of the methods. The
following conclusions were drawn from the results obtained:

Card 1/3

Investigation on the Mobility of Oxygen in Vanadium-Pentoxide by Means
of the Isotope-Exchange Method

153-58-1-3/29

- 1) After an investigation of the isotopic exchange of the vanadium pentoxide with oxygen (at 450, 500, 530 and 550°C) and with steam (at 200, 385 and 450°C), it was found that the exchange with oxygen at all above-mentioned temperatures is accelerated very rapidly. At 200° an exchange against steam does not take place.
- 2) It was proved that the exchange with steam (figures 7 to 9) takes place at lower temperatures and at greater velocities than with molecular oxygen (figures 1 to 6).
- 3) An addition of potassium-sulfate increases the exchange-ability of pentoxide both with oxygen and with steam.
- 4) The exchange between the vanadium-preparations and the molecular oxygen is determined by the exchange on the surface and takes place according to the first order. In the case of steam the velocity of surface-exchange is considerably higher; the oxygen diffusion does not follow the equalization of the isotopic composition in the interior of the crystal, so that the velocity of exchange decreases more rapidly with increasing degree of exchange, than this would

Card 2/3

Investigation on the Mobility of Oxygen in Vanadium-Pentoxide by Means
of the Isotope-Exchange Method 153-58-1-3/29

correspond to the equation of first order. There are 9
figures and 7 references, 6 of which are Soviet.

ASSOCIATION: Moskovskiy khimiko-tekhnologicheskii institut imeni D. I.
Mendeleyeva, Kafedra tekhnologii razdeleniya i primeneniya
izotopov (Moscow Chemical Technological Institute imeni
D. I. Menedelejev, Professorial Chair for the Technology
of the Separation and Use of Isotopes)

SUBMITTED: October 22, 1957

Card 3/3

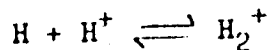
3/844/62/000/000/019/129
D290/D307

AUTHORS: Shubin, V. N., Dolin, P. I. and Krylova, Z. L.

TITLE: Radiolysis of aqueous solutions of various inorganic substances saturated with hydrogen under pressure

SOURCE: Trudy II Vsesoyuznogo soveshchaniya po radiatsionnoy khimii. Ed. by M. S. Polak. Moscow, Izd-vo AN SSSR, 1962, 129-136

TEXT: The radiolysis of aqueous solutions of inorganic substances was studied by using hydrogen under pressure, by a method described earlier (DAN SSSR, 125, 1294 (1959)). Solutions containing Fe^{3+} ions, a mixture of Fe^{3+} and Fe^{2+} ions, and NO_3^- ions were investigated. The experimentally observed yields of oxidation of Fe^{2+} and reduction of Fe^{3+} can be explained by the occurrence of the reaction:



Card 1/2

Radiolysis of aqueous

3/844/62/000/000/019/129
D290/D307

The yields of reduction of NO_3^- ions in neutral solutions at pressures of hydrogen above 100 atmospheres were about 6 equiv/100 ev and did not depend on the NO_3^- ion concentration in the range 3×10^{-3} to 1 M. Results obtained with solutions of both Fe^{3+} and NO_3^- ions show that the yield of decomposition of water was about 4.2⁵ equiv/100 ev and was constant over the pH range ~1 to 7. There are 9 figures and 3 tables.

ASSOCIATION: Institut elektrokhemii AN SSSR (Institute of Electrochemistry, AS USSR)

Card 2/2

MOKHUN', I.K.; KRYLOVA, Z.P.

Cases of leukemias in chronic lymphadenosis. Vrach.delo supplement
'57:35-36 (MIRA 11:3)

1. Propedevticheskaya terapevticheskaya klinika (zav.-dots. A.A. Kolachev) Chernovitskogo meditsinskogo instituta i Chernovitskaya oblastnaya klinicheskaya bol'nitsa.
(LYMPHATICS--DISEASES) (SKIN--DISEASES)

ZIL'BERMAN, Z.I.; KRYLOVA, Z.P.

Two cases of remission in acute leucosis (hemocytoblastosis)
treated with cortisone. Vrach.delo no.2:197-199 F '60.

(MIRA 13:6)

1. Klinika fakul'tetskoy terapii (sav. - prof. N.B. Shchupak)
Chernovitskogo meditsinskogo instituta i Ytoroye terapevtiche-
skoye otdeleniye oblastnoy klinicheskoy bol'nitsy.

(LEUKEMIA)

(CORTISONE)

KRYLOVA-RZHANOVA, Ye. S.

Krylova-Rzhanova, Ye. S. -- "The Problem of the Recombination Mechanism of the Luminescence of Crystalline Phosphors." *Cond Phys-Math Sci, Physics Inst, Acad Sci USSR, Moscow 1953.* (Referativnyy Zhurnal--Khimiya, No 1, Jan 54)

SO: SUM 168, 22 July 1954.

S/056/62/043/006/026/067
B112/B186

AUTHORS: Rapoport, L. P., Krylovetskiy, A. G.

TITLE: Quantum vortices in a fermion system

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 43,
no. 6(12), 1962, 2122 - 2127

TEXT: The fundamental properties of quantum vortices in an unlimited system of fermions at any temperature $T < T_0$ are derived. The fourier components of the Green's temperature functions $G_\omega(r, r')$ and $F_\omega(r, r')$ are determined by the equations

$$\left\{ i\omega + \frac{1}{2m^*} \frac{\partial^2}{\partial r^2} + \mu \right\} G_\omega(r, r') + \Delta_T(r) F_\omega^*(r, r') = \delta(r - r'),$$

$$\left\{ -i\omega + \frac{1}{2m^*} \frac{\partial^2}{\partial r^2} + \mu \right\} F_\omega^*(r, r') - \Delta_T^*(r) G_\omega(r, r') = 0; \quad (1)$$

$$\Delta_T^*(r) = gT \sum_{\omega} F_\omega^*(r, r), \quad \omega = \pi(2n + 1)T, \quad n = \dots -1, 0, 1, \dots \quad (2)$$

where m^* is the reduced mass, μ is the chemical potential, and g is the
Card 1/3

Quantum vortices ...

S/056/62/043/006/026/067
B112/B186

energy of the pair-producing interaction. For the quantities $\psi(r)$ and $\Delta_T^*(r)/\Delta_T^0$ and $l^2 = C/2m^*B$, where

$$C = \frac{2\pi}{3} m^* v_0^2 N_T(0) T \sum_{\omega} \left\{ \frac{1}{(\omega + \sqrt{\omega^2 + \Delta_T^{0*2}}) \sqrt{\omega^2 + \Delta_T^{0*2}}} + \frac{\Delta_T^{0*2}}{2(\omega + \sqrt{\omega^2 + \Delta_T^{0*2}})^2 (\omega^2 + \Delta_T^{0*2})^{3/2}} \right\} + \Delta_T^{0*2} \frac{3\sqrt{\omega^2 + \Delta_T^{0*2}} + \omega}{2(\omega + \sqrt{\omega^2 + \Delta_T^{0*2}})^2 (\omega^2 + \Delta_T^{0*2})^{3/2}} \quad (20)$$

$$B = \frac{\pi}{2} N_T(0) T \sum_{\omega} \frac{\Delta_T^{0*2}}{(\omega^2 + \Delta_T^{0*2})^{3/2}}$$

the vortex equation

$\left\{ r^2 \frac{\partial^2}{\partial r^2} + 1 - |\psi(r)|^2 \right\} \psi(r) = 0. \quad (22)$ is derived. The quantity l has the meaning of an inner vortex radius ($\sim 10^{-12}$ cm for nuclear matter, and $\sim 10^{-4}$ cm for metals at $T = 0$). Its temperature dependence is given by the formula

Card 2/3

Quantum vortices ...

S/056/62/043/006/026/067
B112/B186

$$\frac{1}{l} = \sqrt{\frac{3m^*}{\mu}} \begin{cases} \frac{8\pi^2}{76(3)} \left(T^2 \ln \frac{T_c}{T} \right)^{1/2}, & T \rightarrow T_c \\ \frac{1}{2} (\Delta_0^2 - V 2\pi T \Delta_0^2 e^{-\Delta_0^2/T}), & T \rightarrow 0. \end{cases} \quad (26).$$

The general conclusion is that a system of fermions in the superfluid state possesses quantum vortices similar to those which arise in a boson system.

ASSOCIATION: Voronezhskiy gosudarstvennyy universitet (Voronezh State University)

SUBMITTED: April 14, 1962

Card 3/3

L0087

24.2140

S/020/62/145/004/012/024
B178/B102

AUTHORS: Rapoport, L. P., and Krylovetskiy, A. G.

TITLE: Generalized equations of superconductivity

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 145, no. 4, 1962, 771-774

TEXT: The system of the integral equations

$$G_{\omega}(r, r') = G_{\omega}^0(r, r') - \int \tilde{G}_{\omega}(r, s) \Delta_T(s) \tilde{G}_{\omega}(s, l) \Delta_T(l) G_{\omega}(l, r') d^3s d^3l; \quad (3)$$

$$F_{\omega}^{\pm}(r, r') = \int \tilde{G}_{\omega}^{\pm}(s, r) \Delta_T^{\pm}(s) \tilde{G}_{\omega}^{\pm}(s, r') d^3s - \int \tilde{G}_{\omega}^{\pm}(s, r) \Delta_T^{\pm}(s) \tilde{G}_{\omega}^{\pm}(s, l) \Delta_T(l) F_{\omega}^{\pm}(l, r') d^3s d^3l. \quad (4)$$

where $\tilde{G}(\vec{r}, \vec{r}')$ is the Fourier component of the Green function of electrons for ordinary metal, is derived from the system of equations for the Fourier components of the Green temperature functions by introducing $\tilde{G}(\vec{r}, \vec{r}')$.

$$\tilde{G}_{\omega}^0(r, r') = \exp\{ieA(r)(r - r')\} G_{\omega}^0(r - r'). \quad (5)$$

Card 1/3

S/020/62/145/004/012/024
B178/B102

Generalized equations of...

holds for ordinary metal without magnetic field. The exact equation for the energy gap is

$$g^{-1} \Delta_r^*(r) = T \sum_{\omega} \int \tilde{G}_{\omega}(s, r) \Delta_r^*(s) \tilde{G}_{\omega}(s, r) d^3s - T \sum_{\omega} \int \tilde{G}_{\omega}(s, r) \Delta_r^*(s) \tilde{G}_{\omega}(s, l) \Delta_r(l) F_{\omega}^*(l, r) d^3s d^3l. \quad (6)$$

$$\left\{ \frac{1}{2m} \left(\frac{\partial}{\partial r} + 2ieA(r) \right)^2 + \frac{1}{c} [D - g^{-1} + B |\Delta_r(r)|^2] \right\} \Delta_r^*(r) = 0, \quad (8)$$

$$B = -T \sum_{\omega} \int \tilde{G}_{\omega}(r-s) \tilde{G}_{\omega}(s-l) F_{\omega}^*(l-r) d^3s d^3l,$$

$$C = T \sum_{\omega} \int \tilde{G}_{\omega}(r-s) (r-s)^2 \tilde{G}_{\omega}(s-r) d^3s, \quad (9)$$

$$D = T \sum_{\omega} \int \tilde{G}_{\omega}(r-s) \tilde{G}_{\omega}(s-r) d^3s.$$

Card 2/3

Generalized equations of...

S/020/62/145/004/012/024
B178/B102

is obtained by separating the exponents in (5). In order to clarify the significance of Δ_T , the quantities B, C and D are substituted in (8) where $\tilde{N}(\vec{r}) = 0$, $\Delta_T(\vec{r}) = \text{const.}$

$$g \frac{N(T)}{2} \int_{-\infty}^{\infty} \frac{\text{th} \sqrt{e^2 + \Delta_T^2/2T}}{\sqrt{e^2 - \Delta_T^2}} de = 1, \quad (13)$$

is obtained and with $\Delta_0 = 2\tilde{\omega} \exp(-2/gN(0))$, $\Delta_0 = \pi T_c / \xi$, after some further simplifications ($\Delta_T \sim \Delta_0$)

$$\left\{ \frac{1}{2m} \left(\frac{\partial}{\partial r} + 2ieA(r) \right)^2 + \frac{\Delta_T^2}{\hbar^2} \left(1 - \frac{|\Delta_T(r)|^2}{\Delta_T^2} \right) \right\} \Delta_T^*(r) = 0. \quad (14')$$

is obtained instead of (8). This relation holds for all temperatures down to T=0.

ASSOCIATION: Voronezhskiy gosudarstvennyy universitet (Voronezh State University)

PRESENTED: March 13, 1962, by N. N. Bogolyubov, Academician

SUBMITTED: March 12, 1962

Card 3/3

RAPOFORT, L.P.; KRYLOVETSKIY, A.G.

Quantum vortices in a fermion system. Zhur. eksp. i teor. fiz.
43 no.6:2122-2127 D '62. (MIRA 16:1)

1. Voronezhskiy gosudarstvennyy universitet.
(Quantum theory)

ACCESSION NR: AP4024065

S/0048/64/028/002/0388/0393

AUTHOR: Rapoport, L.P.; Krylovetskiy, A.G.

TITLE: The fragmentation mechanism in interaction of high energy particles with nuclei Report, Thirteenth Annual Conference on Nuclear Spectroscopy held in Kiev 25 Jan to 2 Feb 1963

SOURCE: AN SSSR. Izvestiya. Seriya fizicheskaya, v.28, no.2, 1964, 388-393

TOPIC TAGS: fragmentation mechanism, fragmentation reaction, high energy reaction, nuclear reaction, cascade evaporation theory, nuclear shock wave, Ag¹⁰⁸

ABSTRACT: A number of experimental studies, carried out in recent years both in the Soviet Union and abroad, have disclosed that incident to bombardment of nuclei with high energy particles there are knocked out light nuclei with $Z \geq 3$. This reaction is now called fragmentation. While the experimental aspects of this phenomenon are fairly well known, the nature of the fragmentation mechanism is still obscure. Attempts to explain the fragmentation process by means of the cascade-evaporation theory have met with serious difficulties. In particular, present cascade theory, at any rate, is incapable of explaining the following: 1) absence of corre-

Card 1/3

ACCESSION NR: AP4024065

lation as regards the fragment energies, but presence of correlation as regards direction of the fragment and the fast particle or the two fragments, 2) energy independence of the charge distribution, 3) the multiplicity of fragment production, 4) the presence among the multiply charged fragments of particles with an energy lower than the Coulomb barrier, 5) absence of fast particles scattered to angles close to 180° . According to cascade theory there should be such nucleons, for otherwise one cannot explain the transfer of a large momentum to the fragment ejected forward. In fact, in general, experiments on scattering of fast nucleons lead to a small value of the cross section for transfer of large momentum (G.Leksin and Yu. Kumekin, Zhur. eksp. i teor. fiz. 33, 1147, 1957). In the present paper there is proposed a different fragmentation mechanism, based on development of the idea of collective motions in nuclei (A.E.Glassgold, W.Heckrotto and K.Watson, Ann. Phys. 6, 1, 1959). This mechanism appears capable of explaining a number of effects that are inexplicable by means of the cascade-evaporation theory. The underlying idea is that the heavy fragments are knocked out by a Mach type shock wave forming in the nuclear matter incident to passage through it of a particle with relativistic velocity. The treatment is based on consideration of behavior of a nucleon in a nucleus in accord with the nonstatic theory of a Fermion gas and there is derived the hydrodynamic equation of motion, invoking the principle of least action. The inference is that the

Card 2/3

ACCESSION NR: AP4024065

fragment (nucleon cluster) forms on or at the nuclear surface and is then ejected by the shock wave. Some numerical evaluations are made for the specific case of the parent nucleus Ag^{108} . The evaluations indicate that the probability for ejection of a fragment is determined primarily by the probability W for formation of the appropriate cluster on the nuclear surface and two parameters ΔR and u . The first two quantities are independent of the energy of the particle giving rise to the shock wave; the particle energy dependence of u is obscure. Thus, most of the present experimental data on fragmentation can, at least quantitatively, be explained on the assumption that most of the particles with $Z \leq 2$ are ejected from the nucleus by cascade-evaporation processes and the fragments with $Z \geq 3$ are ejected by the proposed shock wave mechanism. "The authors are grateful to O.V. Lozhkin and Yu.P. Yakovlev for calling their attention to the problem." Orig.art.has: 21 formulas and 1 table.

ASSOCIATION: Voronezhskiy gosudarstvennyy universitet (Voronezh State University)

SUBMITTED: 00

DATE ACQ: 08Apr64

ENCL: 00

SUB CODE: NS

NR REF SOV: 004

OTHER: 006

Card 3/3

KRYLOVETSKIY, A.S., inzh.

Equipment for the automatic hard facing of cylindrical
parts. Svar. proizv. no.11;34 N'63. (MIRA 17:5)

1. Kulebakskiy metallurgicheskiy zavod im. S.M. Kirova.

SHCHEBROV, S.F., tekhn.; KRYLOVETSKIY, A.S., inzh.

Welded cylinder for a 250-ton hydraulic press. Svar. proizv.
no.6:41 Ja. '63. (MIRA 16:12)

1. Kulebaskiy metallurgicheskiy zavod im. S.M.Kirova.

11/EPH(a)-2/EPF(a)-2/ENG(v) EPR ENA

Method of integral transformation of the problem of nonstationary heat conductivity with a moving boundary

Source: Inzhenerno-fizicheskiy zhurnal, no. 7, 1964, 80-86

Heat conductivity, integral transform

ABSTRACT: An approximate solution is given to a number of problems of nonstationary heat conductivity with moving boundaries. The cases of a semi-infinite space and a finite plate of a certain thickness with various boundary conditions are considered. Integral transformations were used to solve the problems. It is assumed that the limit of the surface temperature is constant along the surface.

1964
1 Feb 64
SERIAL NO. 105

ENCL: 1
OTHER: 000

1964
1964
1964

Page 1/1

AUTHOR: FISHER, I.Z., KRYLOVICH, V.I. 57-6-21/36
TITLE: Hydrogen-Like System with a Partially Screened COULOMB Potential. (Vodorodopodobnaya sistema s chastichno eekranirovannym kulonovskim potentsialom, Russian)
PERIODICAL: Zhurnal Tekhn.Fiz. 1957, Vol 27, Nr 6, pp 1289-1293 (U.S.S.R.)
ABSTRACT: When applying the method of an effective mass on the occasion of the motion of the electrons or holes in the crystal, often the problem of the motion of the electron or the hole in the COULOMB field of a certain different charge arises. In these cases hydrogen-like systems are concerned with the only difference that here the motion does not take place in an empty space but in a crystal lattice. Though many works concerning this theme are known, this problem has nowhere been solved quantitatively and systematically. Here the basic equation by SCHROEDINGER for the entire problem of the motion of the electron (or the hole) in a partly screened COULOMB field is solved. The application of the theory to concrete processes in

Card 1/2

Hydrogen-Like Systems with a Partially Screened COULOMB
Potential. 57-6-21/36

metals and semiconductors is given separately. (With 2 Illustrations and 2 Slavic References).

ASSOCIATION: Belorussian State University, Minsk. (Belorusskiy gosuniversitet, Minsk)
PRESENTED BY:
SUBMITTED: 23.5.1956
AVAILABLE: Library of Congress
Card 2/2

FISHER, I.A.; KRYLOVICH, V.I.

Remarks on "superpositional approximation." Uch. zap. BGU no. 32:
207-210 ' 57. (MIRA 11:12)
(Mathematical physics)

NAUMOVICH, V.M. [Nayumovich, V.M.], doktor tekhn.nauk; SHASHKOV, A.G.
[Shashkou, A.H.], kand.tekhn.nauk; KRYLOVICH, V.I.

Aleksei Vasil'evich Lykov; on his 50th birthday. Vesti AN BSSR.
Ser.fis.-tekhn.nav. no.3:120-123 '60. (MIRA 13'9)
(Lykov Aleksei Vasil'evich, 1910-)

KRYLOVICH, V. I.

Velocity of the arc in an electric arc heater. Inzh.-fiz.
zhur. 6 no.1:114-117 Ja '63. (MIRA 16:1)

1. Energeticheskiy institut AN BSSR, Minsk.

(Electric welding)

45117
S/170/63/006/003/009/014
B104/B186

AUTHOR: Krylovich, V. I.

TITLE:

The temperature field in the cooled electrode of a fixed arc heater

PERIODICAL: Inzhenerno-fizicheskiy zhurnal, v. 6, no. 3, 1963, 81 - 85

TEXT: The non-stationary heat transfer problem is studied in which one surface of an unbounded plate is heated by a constant heat flow entering the plate through a circular spot, while the other surface is cooled by convective heat transfer to a medium at a constant temperature θ_0 . The system

$$\frac{\partial}{\partial Fo} = \frac{1}{R} \frac{\partial}{\partial R} \left(R \frac{\partial}{\partial R} \right) + \frac{\partial}{\partial Z^2}$$

$$i(R, Z, 0) = 0;$$

$$\frac{\partial}{\partial Z} i(R, 0, Fo) = \begin{cases} q_0/\lambda, & 0 < R < R_0; \\ 0, & R_0 < R < \infty; \end{cases}$$

$$\frac{\partial}{\partial Z} i(R, 1, Fo) = -Bi i(R, 1, Fo);$$

(1)

(2)

(3)

(4)

Card 1/3

APPROVED

The temperature field in the ...

S/170/63/006/003/009/014
B104/B186

(5)

$$t(\infty, Z, Fo) = 0.$$

of equations is solved in two stages. First the stationary problem is solved using Fourier and Hankel transformations, giving

$$\theta_{cran} = \frac{qhR_0}{\lambda} \int_0^\infty J_1(\xi R_0) J_0(\xi R) \left[\frac{\exp \xi \operatorname{ch} \xi Z}{\xi \operatorname{sh} \xi + \operatorname{Bl} \operatorname{ch} \xi} - \frac{\exp \xi Z}{\xi + \operatorname{Bl}} \right] (\xi + \operatorname{Bl}) \frac{d\xi}{\xi} + \theta_0. \quad (14).$$

Then the non-stationary problem is solved using a Hankel transformation, giving

$$\theta(R, Z, Fo) = \theta_0 + \frac{qhR_0}{\lambda} \int_0^\infty J_0(R\xi) J_1(R_0\xi) \left[\frac{(\xi + \operatorname{Bl}) \operatorname{ch}(\xi Z) \exp(\xi)}{\xi \operatorname{sh} \xi + \operatorname{Bl} \operatorname{ch} \xi} - \exp(\xi Z) - 2\xi \operatorname{Bl} \sum_{n=1}^{\infty} \frac{\exp[-(\xi^2 + \nu_n^2) Fo] \cos \nu_n Z}{(\xi^2 + \nu_n^2)(\operatorname{Bl} + \sin^2 \nu_n)} \right] \frac{d\xi}{\xi}. \quad (31).$$

Card 2/3

S/170/63/006/C03/014/014
B104/B186

AUTHORS: Krylovich, V. I., Zhuk, I. P.

TITLE: Conference on the theory of regular heat conditions

PERIODICAL: Inzhenerno-fizicheskiy zhurnal, v. 6, no. 3, 1963, 118 - 123

TEXT: The conference on the theory of regular heat conditions held on September 25, 1962, in Kiyev in the AS UkrSSR was attended by more than 130 persons from all parts of the USSR. A paper by G. N. Tret'yachenko published in IFZh, no. 9, 1962 was discussed. The conference was opened by the Scientific Main Secretary of the Presidium of the AS UkrSSR, Corresponding Member of the AS UkrSSR G. S. Pisarenko. The chief editor of the IFZh, Academician AS BSSR A. V. Lykov, indicated the different branches of heat physics in which Soviet Scientists work and mentioned G. M. Kondrat'yev and Professor G. N. Dul'nev. First a report of Candidate of Technical Sciences G. N. Tret'yachenko (Kiyev) was discussed. He dealt with misconceptions of the theory and analyzed the origins of the errors. Reports by Professor G. N. Dul'nev, Doctor of Technical Sciences, and Candidate of Technical Sciences N. A. Yaryshev examined the main

Card 1/3

Conference on the theory of ...

S/170/63/006/003/014/014
B104/b186

characteristic of first order regular heat conditions and the time necessary for approaching regular conditions on cooling a system. These reports were discussed by Professor Ya. V. Kudryavtsev, Doctor of Technical Sciences, Professor O. A. Kremnev, Candidate of Technical Sciences G. F. Muchnik, Docent N. V. Shumakov, G. I. Pavlovskiy and others. They pointed out the virtues and deficiencies of regular condition methods and showed that there is no method for theoretically estimating the time necessary for approaching the regular conditions. P. N. Romanen..., M. N. Golyan, G. N. Dul'nev, L. I. Kudryashev, L. I. Zhemkov, and others showed that the experiments of G. N. Tret'yachenko are carried out in pre-regular conditions and the results may not be considered as a proof of the incorrectness of regular condition methods for investigating bodies of complex shapes. A. V. Lykov stated that the theory of regular conditions has a formal mathematical character but no precise physical sense. The methods and instruments for regular condition experiments developed by G. M. Kondrat'yev et al. have certain deficiencies: (1) it is impossible to determine the physical parameters (λ, c, a) of a material in a single test; (2) the measuring instruments are inserted into the test specimen; this may result in considerable mechanical damage and distortion of the temperature field, and hence erroneous conclusions; (3) it is difficult

Card 2/3