

104

11E

Variations of the catalase curve of blood after introduction of pilocarpine on an acid or alkaline diet. S. A. POYORINGAYA. *Russ. J. Physiol.* 13, 188-92(1930).—The curves representing the CATALASE CONTENT of the blood at various times after subcutaneous injection of pilocarpine are of a uniform type for children receiving an alk. but not an acidic diet; where a mixed diet is taken, the curves are of a mixed type. The catalase-time curves for children on an alk. diet not receiving pilocarpine are not of a uniform type. The catalase curves vary irregularly for the same individual according to the day and hour at which the blood is taken. No parallelism is found between blood catalase and hemoglobin contents. H C A

ASB 55A METALLOGICAL LITERATURE CLASSIFICATION

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
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AUTHOR : POVUN, I. D.  
 INST. : ---  
 TITLE : ---  
 ORIG. PUB. : ---  
 ABSTRACT : ---

CLASS: 7/72

COUNTRY :  
SUBJECT : GENERAL A SPECIOLOGY, APPLICIS

ABSTRACT : Ref Zhur-Biologiya, 1950, No.

AUTHOR :  
INITIAL :  
TITLE :

ORIG. PUB.:

ABSTRACT : (1950), and (1950) ...  
-- P. ...

CARD : 1/2

COUNTRY : USSR E  
SUBJECT : GENERAL & SPEC. ZOOLOGY, INSECTS  
Insect and Mite Pests.  
RES. JOURN.: Izv. Vuzov-Biologiya, Ser. 4, 1959, No. 10311  
Author : Novikova, E. I.  
INST. : Ukrainian Acad. of Agric. Sciences  
TITLE : Methods and quantitative measures in gardens  
of the forest steppe and wooded areas of the  
Ukraine.  
ORIG. PUB.: Ukr. akad. sil's'kogospod. nauk, 1958, No. 3,  
20-81  
ABSTRACT : no abstract.

CARD : 1/1

COUNTRY : USSR  
CATEGORY : GENERAL & SPEC. ZOOLOGY, INSECTS  
ABS. JOURN. : Insect and Mite Pests,  
"Zel' Saur-Biologiya", No. 4, 1959, No. 15294

AUTHOR : Fovzun, I. D.  
INSECT. :  
TITLE : Abstract of Proceedings of Several Societies.

ORIG. PUB.: Vinogradarstvo i sadovodstvo Kryma, 1958,  
No. 5, 53-54

ABSTRACT : no abstract.

CARD : 1/1

ZHUKOVSKIY, Abram Borisovich; POZDNEV, A.I., spetsred.; KUZNETSOV, P.V.,  
red.; PONOMAREVA, A.A., tekhn.red.

[Potentialities for the increase of the production of precast  
reinforced concrete; technical and economic analysis] Rezervy  
promyshlennosti sbornogo zhelezobetona; tekhniko-ekonomicheskii  
analiz. Moskva, Gosplanizdat, 1960. 271 p.

(Precast concrete)

(MIRA 13:7)

POVORINSKIY, A.G., mladshiy nauchnyy sotrudnik

Irradiation of excitation as an index of central nervous system  
function in patients with late consequences of closed cranio-  
cerebral trauma. Trudy LIETIN 2:204-212 '59. (MIRA 13:7)  
(SKULL--WOUNDS AND INJURIES)  
(NERVOUS SYSTEM--DISEASES)

POVOLOTSKIY, Ya.L. [Povolots'kiy, IA.L.], aspirant

Specific prevention of epidemic parotitis. Ped., akush. i gin.  
22 no.4:15-18 '60. (MIRA 14:5)

1. Kiyovskiy nauchno-issledovatel'skiy institut epidemiologii i  
i mikrobiologii (direktor - kand.med.nauk S.M.Torekhov, nauchnyy  
rukovoditel' - deystvitel'nyy chlen AMN SSSR prof. L.V.Gromashevskiy  
[Hromashevs'kiy]).

(MUMPS)



POVOLOTSKIY, Ye.G.; MIKHEYEV, N.I.

Detection of dislocations inalnico-type alloys. Zav. lab.  
29 no.9:1111-1112 '63. (MIRA 17:1)

1. Saratovskiy politekhnicheskij institut.

POVORINSKIY, A.G.

Some changes in the EEG revealed through trigger photostimulation  
in individuals with the late sequelae of craniocerebral trauma  
and neuroinfection. Trudy LIETIN 7:80-96 '62. (MIRA 15:8)  
(ELECTROENCEPHALOGRAPHY) (BRAIN--WOUNDS AND INJURIES)  
(NERVOUS SYSTEM--DISEASES)

POVORINSKIY, A.G.

Characteristics of the functional mosaic of the brain revealed through rhythmical light stimuli in individuals with the late sequelae of closed craniocerebral trauma or neuroinfection. Trudy LIETIN 7:65-79 '62. (MIRA 15:8)

(ELECTROENCEPHALOGRAPHY) (BRAIN--WOUNDS AND INJURIES)  
(NERVOUS SYSTEM--DISEASES)

POVORINSKIY, A.G.

Disorders of the functional state of the central nervous system  
detected by the brain reactivity curve. Trudy LIETIN 7:55-64 '62.  
(MIRA 15:8)

(NERVOUS SYSTEM—DISEASES) (ELECTROENCEPHALOGRAPHY)

POVORINSKIY, A.G.

Characteristics of reactions to triggering photostimulation  
in relation to electroencephalographic background changes  
and the localization of the brain lesion. Trudy LIETIN  
no.13:55-70 '64. (MIRA 18:12)

NAULAYNEN, B.A.; POVORINSKIY, A.G.

Automatic apparatus for research on ~~the~~ method of determining the  
brain reactivity curve. Trudy LIETIN<sup>7</sup>:179-183 '62. (MIRA 15:8)  
(ELECTROENCEPHALOGRAPHY--EQUIPMENT AND SUPPLIES)

S/148/63/000/001/013/019  
E073/E451

AUTHORS: Povolotskiy, Ye.G., Dovgalevskiy, Ya.M., Baytina, V.K.

TITLE: On the speed of cooling of magnico alloys

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Chernaya metallurgiya, no.1, 1963, 120-124

TEXT: Cast specimens 15 x 15 x 35 mm of ANKO 4 (Anko 4) (13.8% Ni, 8.4% Al, 23.5% Co, 3.11% Cu, rest Fe) were used to study the relationship between the magnetic properties and the structure for different rates of cooling and different temperatures. The residual induction was measured ballistically, the coercive force was determined by the Steblein method and the microstructure was studied at magnifications of 70 to 1440 X. The dislocation densities were studied by the X-ray diffraction method of Williamson and Smallman. Two separate temperature ranges were investigated, 1280 to 800°C and 800 to 400°C, as above 800°C this alloy is single-phase at the cooling rate employed but between 800 and 400°C a two-phase structure  $\beta_2 \rightarrow \beta + \beta_2$  is formed. In the experiments, the rate of cooling was varied in one temperature range, while kept constant in the Card 1/4

On the speed of cooling ...

S/148/63/G00/G01/013/019  
E073/E451

other. A magnetic field of 1500 Oe was applied during cooling below 800°C; the maximum effect was experienced at 800 to 780°C. Whilst between 800 and 400°C the coercive force drops sharply with increasing cooling rate, the residual induction remains unchanged. At a cooling speed of 15 to 20 deg/min, the coercive force increases to its maximum value. Varying the cooling rates above 800°C, and maintaining a constant cooling rate (15 to 20 deg/min) below 800°C (the optimum from the point of view of the coercive force), bring about hardly any change in the coercive force but lead to a drop in the residual induction to 1000 gauss in the two limiting cases (very slow and very fast cooling rates). The highest residual induction is obtained with a cooling rate of about 200 deg/min between 1280 and 800°C and the maximum coercive force is obtained for a cooling rate of 15 to 20 deg/min below 800°C. Thermomagnetic treatment permits both these values to be increased, so achieving the highest possible magnetic energy  $(BH)_{max}$ . The basic magnetic characteristics achieved by ordinary and thermomagnetic treatment are determined by the state of the alloy in the two temperature ranges, above and below 800°C.

Card 2/4



Or. the speed of cooling ...

S/148/63/000/001/013/019  
E073/E451

The cooling rate which gives the maximum residual induction (200 deg/min) reduces appreciably the coercive force if applied below 800°C, whilst the cooling rate corresponding to the maximum coercive force (15 to 20 deg/min) if applied in the temperature range 1280 to 800°C will lead to a sharp drop in the residual induction. Therefore, use of some average critical speed for the entire temperature range cannot be justified. The dislocation density results, which are in full agreement with the microstructure, show that the dislocation density is highest at high cooling rates and lowest at the intermediate cooling rate which gives the optimum residual induction. The optimum cooling rate for obtaining a maximum residual induction is the one which does not cause an excessively high density of dislocations and does not lead to decomposition along the grain boundaries. Since slow cooling leads to a more perfect alloy, it can be anticipated that alloying additions which increase the resistance of the high temperature solid solution to decomposition (for instance small amounts of titanium) will reduce the optimum cooling rate during heat treatment. It will then be possible to achieve a single critical rate throughout the entire cooling range. Its  
Card 3/4

On the speed of cooling ...

S/148/63/000/CG1/G13/G19  
EO73/E451

value will be low, thus permitting heat treatment of magnets of varying cross-section using a single set of conditions. AlNi alloys are usually subjected to rapid cooling from 1150 to 1200°C in boiling water, or to normalizing, to obtain maximum coercive force. However, the residual induction is low and the critical rate governs only the extent of low temperature decomposition  $\beta_2 \rightarrow \beta + \beta_2$ . It is possible that slower cooling to the temperature at which this decomposition begins would lead to an increase in the residual induction. There are 3 figures.

ASSOCIATION: Saratovskiy politekhnicheskiy institut  
(Saratov Polytechnic Institute)

SUBMITTED: October 27, 1961

Card 4/4

POVORINSKIY, Yu.A.

Pathogenically based therapy of alcoholism. Vop.psikh.i nevr.  
no.7:285-292 '61. (MIRA 15:8)

1. Iz psikhonevrologicheskogo instituta imeni V.M.Bekhtereva (dir.  
chlen-korrespondent Akademii pedagogicheskikh nauk RSFSR prof. V.N.  
Myasishchev).

(ALCOHOLISM)

MIRSKAYA, M.M.; POVORINSKIY, Yu.A.; RUBINOVA, R.S.

Differentiated work and biological therapy in psychiatric wards for the acutely ill. Vop.psikh.i nevr. no.7:312-318 '61. (MIRA 15:8)

1. Iz 2-y psikhiatricheskoy kliniki (zav. prof. Yu.A.Povorinskiy) Nauchno-issledovatel'skogo psikhonevrologicheskogo instituta imeni V.M.Bekhtereva (dir. chlen-korrespondent Akademii pedagogicheskikh nauk RSFSR prof. V.N.Myasishchev).

(MENTALLY ILL--CARE AND TREATMENT) (OCCUPATIONAL THERAPY)

MIRSKAYA, M.M.; POVORINSKIY, Yu.A.; RUBINOVA, R.S.

Differentiated work and biological therapy in psychiatric wards for the acutely ill. Vop.psikh.i nevr. no.7:312-318 '61. (MIRA 15:8)

1. Iz 2-y psikiatricheskoy kliniki (zav. prof. Yu.A.Povorinskiy) Nauchno-issledovatel'skogo psikhonevrologicheskogo instituta imeni V.M.Bekhtereva (dir. chlen-korrespondent Akademii pedagogicheskikh nauk RSFSR prof. V.N.Myasishchev).  
(MENTALLY ILL--CARE AND TREATMENT) (OCCUPATIONAL THERAPY)

POVORINSKIY, Yu. A., DOLIN, A. O., and MINKER-BGGDANOVA, Ye. T.

"The Role of the Cerebral Cortex in the Regulation of Metabolic Processes,"  
Ark. Sci. Biol., 36B, pp 65-77, 1934

The sugar, Cl and fat curves were detd. in the blood of 2 female patients with hysteria under hypnotic suggestion of receiving sugar when water was actually given and vice versa. It is claimed that the suggested idea rather than the substance given detd. the shape of the blood-sugar curves, but the cited figures are contradictory and are not convincing.

W.A.Perlzweig

POVORINSKIY, Yu. A., F. P. MAIOROV, F.P., VINOGRADOV, N. V., and GOLOBINA, V.P.

"Attempts at the Treatment of Schizophrenia with Tissue Histolyzates of Tushnov," Arkh. Sci. Biol. 37, pp 193-211, 1935.

Seventeen patients were treated. Positive results are claimed in 5 cases and none in the others. W.A.Perlzweig





POVEDENIY, Ya. A.

34139. Vliyaniye emotsional'nykh sostoyaniy na sosudovuyu i myo reaktsii.  
V sb: Problemy kortiko-vizual'noy patologii. M., 1980, s. 100-5.

SC: Knizhnyy Letopis' No 6, 1959

POVORINSKIY, Yu. A.; LEBEDEV, B. A.

V.N. Miasishchev; 60th anniversary of his birth  
and 34th anniversary of his scientific, pedagogic,  
and organizational activities. Zh. nevropat. psikhiat.,  
Moskva 53 no.12:979 Dec. 1953 (CIAM 25:5)

PAVLOV, B.V.;POVORINSKIY, Yu.A.

Problem of the relationship of first and second signal system in the somnambular phase of hypnosis. Zh. vysshei nerv. delat. 3 no.3:381-392 May-June 1953.  
(CIMI 25:4)

1. Laboratory of Physiology and Pathology of Higher Nervous Activity of the Institute of Physiology imeni I. P. Pavlov, Academy of Sciences USSR.



POVORINSKIY, Yu.A.

Modification of cutaneo-vascular reactions in hypnosis in direct and verbal stimulation. Zh. nevropat. psikhiat., Moskva 53 no.11:854-860 Nov 1953. (CJML 25:4)

1. Leningrad.

*TRANS - M-240, 7 MAR 55*

POVORINSKIY, Yu.A.; LEBEDEV, B.A.

Sixtieth anniversary of V.M.Miasishchev. Zhur.nevr.i paikh. 53 no.12:979  
D '53. (MLRA 6:12)

(Miasishchev, Vladimir Nikolaevich, 1893- )

POVORINSKIY, YU. A.

Med

Functional states of the brain cortex resulting from the administration of phenamyl and sodium amyral and their influence on the carbohydrate metabolism. Yu. A. Povorinskiy (V. M. Bekhterev Psychoneurological Inst., Leningrad). *Zhur. Neuro-patol. i Psichiatrit im. Korsakova* 55, 6-16 (1955).—Under study were patients suffering of psychomotor agitation and of a state of depression-asthenia following the administration of phenamyl (I) and Na amyral (II). Observations were also made on 3 normal controls and 3 exptl. dogs. Blood sugar detns. were made first on an empty stomach and at 30 min. intervals for 2.5 hrs. after the ingestion of 50 g. of glucose (sugar tolerance test). A few days later starvation blood sugar detns. were made again, 0.5 g. of II administered and 1 hr. later 50 g. of glucose ingested. Following another few days the procedure was repeated using 0.015 g. of I. I or II alone did not affect the blood sugar level during the first 2.5-3.0 hrs. After the administration of 50 g. of glucose to neuro-patients in a state of heightened agitation, the av. increase in the blood sugar was 43.6% and in patients in a state of depression-asthenia the av. increase was 64%. In 13 of the 17 patients in the state of depression-asthenia the rise in the blood sugar became manifest within 30 min. and in 10 of the 16 patients with symptoms of psychomotor agitation in 1 hr. after the glucose administration, but returned to the original level in 2 hrs. In 0.5-g. doses II caused all patients to fall into a 2-6 hrs. sleep. In 0.015 g. doses I brought about a state of increased agitation in the psychomotor patients and a state of somnolence in 10 of the 17 depression-asthenia patients. The administration of glucose in the presence of I or II produced blood-sugar curves differing in a characteristic way from the blood-sugar curves produced by glucose alone.

H. S. Levine

USSR/Medicine - Neurophysiology, hypnosis

FD-2371

Card 1/1      Pub. 154-2/18

Author      :    Pavlov, B. V.; Povorinskiy, Yu. A.; and Bobkova, V. V. (Leningrad)

Title        :    On the question of interaction between the first and second signal systems during the somnambulistic phase of hypnosis. Report II.

Periodical :    Zhur. vys. nerv. deyat., 5, 11-18, Jan/Feb 1955

Abstract    :    The aim of this report is to clarify some peculiarities of bioelectric activity of the brain (in healthy adults) during the somnambulistic phase of hypnosis in response to action of positive and inhibitive direct sound, light, and verbal stimuli. A limited focus of intensive excitation becomes formed in the second signal system during the somnambulistic phase of hypnosis. This arises as result of the simultaneous action of verbal and direct stimuli which are opposite in significance (one positive and one negative). These symptoms are connected, apparently, with the inductive inhibition of temporary connections in the first signal system. Five Soviet and six non-Soviet references. 2 diagrams.

Institution:    --

Submitted    :    July 22, 1954



POVORINSKIY, Yu. A.

Effect on carbohydrate metabolism of functional states of the cerebral cortex following application of amytal sodium and phenomine. Zhur. nevr. i psikh. 55 no.1:6-16 Ja '55. (MLRA 8:2)

1. Leningradskiy psikhonevrologicheskiy institut imeni V.M.Bekhtereva (dir. prof. V.N.Myasishchev)

(BLOOD SUGAR, effect of drugs on, acetophenetidin & amobarbital)

(ACETOPHENETIDIN, effects, on blood sugar & carbohydrate metab.)

(BARBITURATES, effects, on blood sugar & carbohydrate metab.)

(CARBOHYDRATES, metabolism, eff. of acetophenetidin & amobarbital)

*POVORINSKII, Yu.A.*  
SEREDINA, M.I.

Methods of studying conditioned motor reflexes based on speech reinforcement. Yu.A. Povorinskii. Reviewed by M.I. Seredina.  
Zhur. nevr. i psikh. 55 no. 11: 871-875 (MLRA 8:11)  
(CONDITIONED RESPONSE) (POVORINSKII, Yu.A.)

POVORINSKIY, Yu.A., DNEPROVSKAYA, S.V.

Use of certain pharmacological substances which reinforce the action of insulin in treatment of schizophrenia; clinical and experimental studies. [with summary in French]. Zhur.nevr. i psikh. 28 no.9:1106-1111 '58 (MIRA 11:11)

1. Psikhiatricheskaya klinika (rukovoditel' - prof. Yu.A. Povorinskiy) Leningradskogo nauchno issledovatel'skogo psikhonevrologicheskogo instituta im. Bekhtereva (dir. - prof. V.N. Myasishchev).  
(SHOCK THERAPY INSULIN, in var. dis.  
schizophrenia, with reinforcing drugs (Rus))  
(SCHIZOPHRENIA, ther.  
insulin shock, with reinforcing drugs (Rus))

MARKOVA, Ye.N., otv. red.; AVERBUKH, Ye.S., red.; BLINOV, N.I., red.; BONDAREV, N.I., red.; BORZUNOVA, A.S., red.; ZEMEVICH, G.V., red.; MNUKHIN, S.S., red.; MYASISHCHEV, V.N., red.; PERVOMAYSKIY, B.Ya., red.; POVORINSKIY, Yu.A., red.; POLIKARPOV, S.N., red.; SIBIRKIN, N.V., red.; FEDOTOV, D.D., red.; CHISTOVICH, A.S., red.; ZACHEPITSKIY, R.A., red.

[Problems of psychiatry; anniversary collection of articles dedicated to the 60th birthday of Professor Izmail Fedorovich Sluchevskii] Problemy psikhatrii; iubileinyi sbornik, posviashchenyi 60-letiiu so dnia rozhdeniia profesora Izmaila Fedorovicha Sluchevskogo. Leningrad, Meditsina, 1964. 434 p. (MIRA 17:12)

PAVLOV, B.V.; POVORINSKIY, Yu.A.

Following Pavlov's path; recent research on the higher nervous activity of man and animals. Priroda 51 no.5:25-33 My '62.  
(MIRA 15:5)

1. Institut fiziologii im. I.P.Pavlova AN SSSR, Leningrad.  
(Conditioned response)

POVORINSKIY, Yu.A.; ZIMUKOVA, L.I.

New variants of combined protective-inhibitory and autonomic stimulation therapy in certain psychotic states. Trudy Gos. nauch.-issl. psikhonevr. inst. no.24:127-134 '61. (MIRA 15:5)

1. 2-oye psikhiatricheskoye otdeleniye Gosudarstvennogo nauchno-issledovatel'skogo psikhonevrologicheskogo instituta imeni Bekhtereva. (PSYCHOTHERAPY)

POVORINSKIY, Yu.A.

"Method in the experimental study of the higher nervous system in  
man" by V.K.Faddeeva. Reviewed by IU.A.Povorinskii. Zhur. vys. nerv.  
deiat. 11 no.5:966-968 S-0 '61. (MIRA 15:1)  
(NERVOUS SYSTEM) (FADDEVA, V.K.)

S/026/62/000/005/001/010  
D036/D113

AUTHORS: Pavlov, B.V.; Povorinskiy, Yu. A.

TITLE: Along Pavlov's path

PERIODICAL: Priroda, no. 5, 1962, 25-33

TEXT: This very general article reviews present research into the higher nervous activity of man and animals. Specific breakthroughs or data collected during previous Soviet manned space flights are not mentioned. It is concluded that many problems of the higher nervous activity are still unsolved, above all the intimate nature of cortical excitation and inhibition, the mechanism and localization of the switching of temporary connections in the brain, the cortical-subcortical interrelations, and the regularities of the evolution of the higher nervous activity. A new approach is required for studying physiological processes on which the higher nervous activity and abstract thinking are based. Future manned space flights will help in studying factors affecting the state of the higher nervous activity

Card 1/2



Along Pavlov's path

S/026/62/000/005/001/010  
DG36/D113

of the cosmonaut, and incounteracting their harmful effects. There are 8 figures.

ASSOCIATION: Institut fiziologii im. I.P. Pavlova AN SSSR (Institute of Physiology im. I.P. Pavlov, AS USSR), Leningrad.

Card 2/2

POVORINSKIY, Yu.A.; SHATALOVA, A.A.; DNEPROVSKAYA, S.V.; ZIMUKOVA, L.I.;  
KOLESOVA, A.A.

Increase and acceleration of the action of insulin in the combined treatment of schizophrenia by means of a change in the reactivity of the body. Trudy Gos. nauch.-issl. psikhonevr. inst. no. 20:191-204 '59. (MIRA 14:1)

1. Gosudarstvennyy nauchno-issledovatel'skiy psikhonevrologicheskiy institut imeni V.M. Bekhtereva, Leningrad.  
(SCHIZOPHRENIA) (INSULIN)  
(NERVOUS SYSTEM, AUTONOMIC)

POVORINSKIY, Yu.A.

Method for the investigation of the higher nervous activity in  
man. Zhur. vys. nerv. deiat 10 no. 4:626-629 J1-Ag '60.  
(MIRA 14:2)

1. The Bekhterev Psychoneurological Institute, Leningrad.  
(CONDITIONED RESPONSE)

POVOROZHENKO, V., prof., doktor tekhn. nauk

Efficiency of recommendations. NTO 6 no.6:13-16 Je '64.  
(MIRA 17:8)

1. Predsedatel' komiteta Vsesoyuznogo soveta nauchno-tekhnicheskogo obshchestva po transportu.

POVOROZHENKO, V.V., doktor tekhn. nauk, prof.; REZER, S.M., inzh.

Application of linear programming in the planning of the work  
of freight stations. Vest. TSNII MPS 23 no.1:53-57 '64.  
(MIRA 17:4)

1. Moskovskiy institut inzhenerov zheleznodorozhnogo transporta.

POVOROZHENKO, V.V., doktor tekhn.nauk, prof.; TIKHOMIROV, I.G., doktor tekhn.nauk, prof.

A.D.Karetnikov, N.A.Vorob'ev's book on the improvement of train sheets and the utilization of railroad line capacity. Vest. TSNII MPS 20 no.2:63-64 '61. (MIRA 14:3)  
(Railroads--Traffic)  
(Karetnikov, A.D.) (Vorob'ev, N.A.)

POVOROZHENKO, V.V., prof., doktor tekhn. nauk

Determining the efficiency of the concentration of freight  
operations in a reduced number of stations. Zhel. dor. transp.  
46 no.1:57-60 Ja '64. (MIRA 17:8)

POVOROZHENKO, V.V., prof., doktor tekhn. nauk; TRIKHUNKOV, M.F., inzh.

Increasing the effectiveness of freight transportation in containers.  
Zhel. dor. transp. 41 no.10:11-16 0 '59. (MIRA 13:2)  
(Railroads--Freight) (Containers)



POVOROZHENKO, V.V., prof., doktor tekhn. nauk

Organization of local work on lengthened haul distances. Zhel. dor.  
transp. 45 no. 7:56-60 JI '63. (MIRA 16:9)

(Railroads--Management)

POVOROZHENKO, Vladimir Vasil'yevich; ORLOVA, I.A., red.

[Increasing the operative capacity of freight cars] Povyshenie proizvoditel'nosti gruzovogo vagona. Moskva, Transport, 1965. 195 p. (MIRA 18:7)

POVOROZHENKO, Vladimir Vasil'yevich; SITNIK, Mikhail Danilovich;  
FURMAN, Yevgeniy Sergeevich; SHAFIRKIN, B.I., inzh.,  
retsenzent; FERAPONTOV, G.V., inzh., red.; VOROB'YEVA, L.V.,  
tekh. red.

[Common carrier and freight forwarding services on railroads]  
Transportno-ekspeditsionnoe obsluzhivanie na zheleznykh dorozh-  
gakh. Moskva, Transzheldorizdat, 1962. 146 p. (MIRA 16:1)

(Freight and freightage)

POVOROZHENKO, V.V., prof., doktor tekhn.nauk

Prospects of the expansion of container transportation and of the  
distribution of container bases. Zhel.dor.transp. 44 no.4:32-35  
Ap '62. (MIRA 15:4)

(Railroads--Freight)

POVQROZHENKO, V.V., prof., doktor tekhn.nauk; TRIKHUNKOV, M.F., inzh.

Parcel post service in the Moscow Office. Gor. khoz. Mosk. 35  
no.8:25-27 Ag '61. (MIRA 14:8)  
(Moscow--Parcel post)

POVOROZHENKO, V.V., doktor tekhn.nauk, prof.

Potentials of improvement in the railroad transportation of  
petroleum. Vest. TSNII MPS 20 no.6:52-54 '61. (MIRA 14:10)

1. Moskovskiy institut inzhenerov zheleznodorozhnogo transporta  
im. I.V. Stalina.

(Petroleum--Transportation)  
(Railroads--Freight)

POVOROZHENKO, V.V., prof.doktor tekhn.nauk

Useful book on automation of the train traffic control  
("Efficiency of CTC on single and double-track lines" by V.E.  
Kozlov. Reviewed by V.V.Povorozhenko). Vest.TSNII MPS 18 no.8:  
60-61 D '59. (MIRA 13:9)

1. Moskovskiy institut inzhenerov zheleznodorozhnogo transporta  
im. I.V.Stalina.  
(Railroads--Automatic train control)

DZUKOVSKIY, Ya. M. (Prof.); POVORODZENKO, V. V. (Prof.)

"Ravnomernost' Gruzovoi i Poezdnoi Raboty Dorogi," (Equality of Loading and Passenger Work of the Railway), 104 p., State Railway Transportation Publ., Moscow, 1950.



POVORCZHENKO, V.V., prof.; TRIKHUNKOV, M.F., inzh.

Potentialities of a further expansion and increase in efficiency  
of freight transportation in containers. Trudy MIIT no.146:4-37  
'62. (MIRA 15:12)

(Railroads—Freight)  
(Containers)

POVOROZHENKO, V.V., professor; SOLOV'YEV, N.A., inzhener.

Twenty-fifth anniversary of the founding of the Moscow Institute  
of Transportation Economics. Trudy MTBI no.3:3-17 '56.  
(MIRA 10:6)

1. Nachal'nik Moskovskogo transportno-ekonomicheskogo instituta  
(for Povorozhenko). 2. Sekretar' partbyuro Moskovskogo transportno-  
ekonomicheskogo instituta (for Solov'yev).  
(Moscow--Technical education)

POVOROZHENKO, Vladimir Vasil'yevich, prof.; SITNIK, Mikhail Danilovich; SYTSKO, Petr Aleksandrovich, dots.; MIKHAYLOV, G.I., dots., red.; NEKHAY, V.T., red.; KISLYAKOVA, M.N., tekhn. red.

[Problems of the improvement of carrying and forwarding services in the U.S.S.R.] Voprosy sovershenstvovaniia transportno-ekspeditsionnogo obsluzhivaniia v SSSR; materialy. Pod red. V.V.Povorozhenko, G.I.Mikhailova. Minsk, Izd-vo M-va vysshego, srednego spetsial'nogo i professional'nogo obrazovaniia BSSR, 1963. 94 p.

(MIRA 17:1)

1. Nauchno-tekhnicheskoye setevoye soveshchaniye v BIIZhT, Gomel', 1962. 2. Zaveduyushchiy sektorom Instituta kompleksnykh transportnykh problem Gosplana SSSR (for Sitnik).

POVOROZHENKO, Vladimir Vasil'yevich, doktor tekhn.nauk, prof.; PETRISHIN,  
Lev Leont'yevich, dotsent; STEFANOV, Nikolay Yakovlevich, dotsent;  
BOROVOY, Natan Yefimovich, dotsent; GALATCHENKO, Nikolay Prokof'yevich,  
dotsent; TSARENKO, A.P., inzhener, red.; BOBROVA, Ye.N., tekhn.red.

[Organization of traffic in railroad transportation] Organizatsiia  
dvizheniia na zheleznodorozhnom transporte. Pod obshchei red.  
V.V.Povorozhenko. Moskva, Gos.transp.zhel-dor.izd-vo, 1957. 362 p.  
(MIRA 10:12)

(Railroads--Traffic)

*POVOZHENKO V.V.*  
SOYUZOV, Anatoliy Anan'yevich, dotsent, kandidat tekhnicheskikh nauk; IVANOV, L.A.,  
retsensent; POVOZHENKO V.V., retsensent; MIRONOV, V.P., redaktor;  
MAKRUSHINA, A.N., redaktor; KRASNAYA, A.K., tekhnicheskiiy redaktor.

[Organization of the work of the river fleet] Organizatsiia raboty  
rechnogo flota. Izd.2-oe, perer.1 dop. Moskva, Izd-vo "Rechnoi  
transport," 1957. 514 p. (MIRA 10:10)  
(Inland water transportation)

POVOROZHENKO, V. N.

Raspredelenie sortirovochnoi raboty i razmeshchenie sortirovochnykh stantsii.  
(Distribution of sorting operations and marshalling yards). (Zhel-dor. transport,  
1947, no. 9. p. 33-42).

DLC: HE7.25

SO: Soviet Transportation and Communications, A Bibliography Library of Congress,  
Reference Department, Washington, 1952, Unclassified.

POVOROZHENKO, V.V., professor

Problems of operating railroads under winter conditions. Tekh.  
zhel.dor. 6 no.9:8-11 S'47. (MLRA 8:12)  
(Railroads--Cold weather operation)

POVOROZHENKO, V., professor, doktor tekhnicheskikh nauk

Distribution of shunting work and locations for shunting yards. Zhel.  
dor.transp. no.9:33-42 S'47. (MLRA 8:12)

(Railroads--Making up trains)



POVOROZHENKO, Vladimir Vasil'Yevich

Transport SSSR (By) V. V. Povorozhenko (1 Dr.)

Moskva, Izd-vo "Morskoy Transport", 1960.

536 P. Illus., Diagrns., Graphs, Maps, Tables.

Bibliographical Footnotes.

POVOROZHENKO, V.V., professor; PEYSAKHZON, B.E., dotsent

Thirty years of the Soviet system of operating railroads. Tekh.  
zhel.dor.6 no.12:1-6 D'47. (MLRA 8:12)  
(Railroads--Management)

POVOROZHENKO, V.V., prof.

Importance of the acceleration of railroad car circulation for the  
national economy. Sbor. trud. Akad. zhel. transp. no.1:18-33 52.  
(Railroads--Management) (MIRA 11:3)

POVOROVNENKO, V. V. (ed.)

KT-1316  $\sqrt{A}$  Uniform Tempo in Railroad Freight-Handling and Line Operations (based on the practice of the Moscow-Donbas Railroad) Moscow, 1950.  
(Original Russian source unavailable for review. Translation does not include illustrations)

POVOROZHENKO, V. V.

Pogruzka i vygruzka na prorezhutochnykh stantsiakh bez ottsepki vagonov ; organizatsiia i raschety. [Loading and unloading in intermediate stations without uncoupling the railroad cars]. Moskva, Gos. transp. zhel-dor. izd-vo, 1946. 83 p. illus.  
DLC: TF662.P62

Ratsional'naia perevozka snabzhencheskikh грузов. [Efficient transport of consumers goods]. (Zhel-dor. transport, 1943, no. 7, p. 31-35).  
DLC: HE7.Z5

SO: Soviet Transportation and Communication, A Bibliography, Library of Congress Reference Department, Washington, 1952 Unclassified (Card 2 of 2)

POVOROZHENKO, V

V

U/5

755.73

.P8

Die Planung des Durchgangsgüterzugverkehrs. Berlin,  
Technik, 1954.

111 p. diags., tables. (Schriftenreihe des Verlages Technik  
Band 162)

Translation from the Russian: Planirovaniye marshrutizatsii pere-  
vozok i iye effektivnost', Moscow, 1952.

Added T.-P. in Russian.

Povorozhenko, V. V.

N/5  
755.36  
.F8

Organizatsiya Perevozok Nalivnykh Gruzov Na Zheleznodorozhnom Transporte (Organizing the transportation of Liquid Cargo by Railroad) Moskva, Transzheldorizdat, 1951.

230 P. Diagr., Tables.

Bibliography: P. 220-221.

POVOROZHENKO, V.V., professor.

On improving the organization of local flow of railroad cars. *Trudy*  
MTEI no.2:40-62 '55. (MLRA 9:11)  
(Railroads--Management)



VYLETNIKOVA, Yelena Pavlovna, kand.tekhn.nauk; PYKHOV, Nikolay  
Ivanovich, kand.tekhn.nauk. Primali uchastiye: POVOROZHENKO,  
V.V., doktor tekhn.nauk; KOCHETOV, S.N., inzh.. CHECHEL', A.A.,  
red.; BOBROVA, Ye.N., tekhn.red.

[Organization and commercial operations in railway transport]  
Organizatsiya perevozok i kommercheskaya rabota na zhelezno-  
dorozhnom transporte. Moskva, Gos.transp.zhel-dor.izd-vo, 1959.  
522 p. (MIRA 12:11)

(Railroads)

BENESHNEVICH, I.I., kandidat tekhnicheskikh nauk; BOGIN, N.H., kandidat tekhnicheskikh nauk; BIKOV, Ye.I., inzhener; VLASOV, I.I., kandidat tekhnicheskikh nauk; BRYSSEVSKIY, M.Ye., inzhener; GRUBER, L.O., inzhener; GURVICH, V.G., inzhener; DAVIDOV, V.N., inzhener; YER-SHOV, I.M., kandidat tekhnicheskikh nauk; ZASORIN, S.N., kandidat tekhnicheskikh nauk; IVANOV, I.I., kandidat tekhnicheskikh nauk; KRAUKLIS, A.A., inzhener; KRUTOV, L.B., inzhener; LAPIN, V.B., inzhener; LASTOVSKIY, V.F., dotsent; LATUNIN, N.I., inzhener; MARKVARDT, K.G., professor, doktor tekhnicheskikh nauk; MAKHAYLOV, M.I., professor, doktor tekhnicheskikh nauk; NIKANGROV, V.A., inzhener; OSKOLKOV, K.N., inzhener; OKHOSHIN, L.I., inzhener; PAREFNOV, K.A., dotsent, kandidat tekhnicheskikh nauk; PERTSOVSKIY, L.M., inzhener; POPOV, I.P., inzhener; PORSHNEV, B.G., inzhener; RATNER, M.P., inzhener; ROSSIYEVSKIY, G.I., dotsent, kandidat tekhnicheskikh nauk; RYKOV, I.I., kandidat tekhnicheskikh nauk; RYSHKOVSKIY, I.Ya., dotsent, kandidat tekhnicheskikh nauk; SYABKOV, A.Ya., professor [deceased]; TAGER, S.A., kandidat tekhnicheskikh nauk; KHAZEN, M.M., professor, doktor tekhnicheskikh nauk; CHERNYSHEV, M.A., doktor tekhnicheskikh nauk; MMIN, L.Ye., professor, doktor tekhnicheskikh nauk; YURENEV, B.N., dotsent; AKSENOV, I.Ye., dotsent, kandidat tekhnicheskikh nauk; ARKHANGEL-SKIT, A.S., inzhener; BARTENEV, P.V., professor, doktor tekhnicheskikh nauk; BERNGARD, K.A., kandidat tekhnicheskikh nauk; BOROVQY, N.Ye., dotsent, kandidat tekhnicheskikh nauk; BOGDANOV, I.A., inzhener; BOGDANOV, N.K., kandidat tekhnicheskikh nauk; VIBNIGIBENKO, H.G., dotsent, kandidat ekonomicheskikh nauk;

(Continued on next card)

BENESHEVICH, I. I. (continued) Cards.

VASIL'YEV, V. F., inzhener; GONCHAROV, N. G., inzhener; DERYBAS, A. T., inzhener;  
 DOBROSELSKIY, K. M., dotsent, kandidat tekhnicheskikh nauk; DLUGACH,  
 B. A., kandidat tekhnicheskikh nauk; ISYIMOV, G. P., kandidat tekni-  
 cheskikh nauk; ZEMBLINOV, S. V., professor, doktor tekhnicheskikh  
 nauk; ZABELLO, M. L., kandidat tekhnicheskikh nauk; IL'IN, K. F.,  
 kandidat tekhnicheskikh nauk; KARGENIKOV, A. D., kandidat tekhnich-  
 skikh nauk; KAPLUN, F. S. H., inzhener; KANSHIN, M. D., KOCHNEV, . . P.,  
 professor, doktor tekhnicheskikh nauk; KOGAN, L. A., kandidat tekhnii-  
 cheskikh nauk; KUGHURIN, S. F., inzhener; LEVASHOV, A. D., inzhener;  
 MAKSIMOVICH, B. M., dotsent, kandidat tekhnicheskikh nauk; MARTYNOV,  
 M. S., inzhener; MEDDEL', O. M., inzhener; NIKITIN, V. D., professor,  
 kandidat tekhnicheskikh nauk; PADNYA, V. A., inzhener; PANTELEEV, P. I.,  
 kandidat tekhnicheskikh nauk; PESTROV, A. P., professor, doktor tekni-  
 cheskikh nauk; POYORCHHENNO, Y. Y., professor, doktor tekhnicheskikh  
 nauk; PISKAREV, I. I., dotsent, kandidat tekhnicheskikh nauk; SERGEYEV,  
 Ye. S., kandidat tekhnicheskikh nauk; SIMONOV, K. S., kandidat tekhnii-  
 cheskikh nauk; SIMANOVSKIY, M. A., inzhener; SUYAZOV, I. G., inzhener;  
 TALDAYEV, F. Ya., inzhener; TIKHONOV, K. K., kandidat tekhnicheskikh  
 nauk; USHAKOV, N. Ya., inzhener; USFENSKIY, V. K., inzhener; FEL'DMAN,  
 E. D., kandidat tekhnicheskikh nauk; FERAPONTOV, G. V., inzhener;  
 KHOKHLOV, L. P., inzhener; CHERNOMORDIK, G. I., professor, doktor  
 tekhnicheskikh nauk; SHAMAYEV, N. F., inzhener; SHAFIRKIN, B. I.,  
 inzhener; YAKUSHIN, S. I., inzhener; GRANOVSKIY, P. G., redaktor;  
 TISHCHENKO, A. I., redaktor; ISAYEV, I. P., dotsent, kandidat tekni-  
 cheskikh nauk, redaktor; KILANOV, V. Y., dotsent, kandidat tekhnicheskikh

(Continued on next card)

BENESHEVICH, I.I. (continued) (Card 3).

nauk, redaktor; MARKOV, M.V., inzhener, redaktor. KALININ, V.K.,  
inzhener, redaktor; STEPANOV, V.W., professor, redaktor; SIDOROV, H.I.,  
inzhener, redaktor; GERONIMUS, B.Ye., Kandidat tekhnicheskikh nauk,  
redaktor; ROBEL', R.I., otvetstvennyy redaktor

[Technical reference manual for railroad engineers] Tekhnicheskii  
spravochnik zheleznodorozhnika. Moskva, Gos. transp.zhelez-dor. izd-vo.  
Vol.10. [Electric power supply for railroads] Snabzhenie zhelez-  
nykh dorog. Otv. red. toma K.G.Markov. 1956. 1080 p. Vol.13.  
[Operation of railroads] Eksploataatsia zheleznnykh dorog. Otv. red.  
toma R.I.Robel'. 1956. 759 p. (MLRA 10:2)

1. Chlen-korrespondent Akademii nauk SSSR (for Patrov)  
(Electric railroads) (Railroads - Management)

FOVOROZHENKO, V. V.

"Organization of freight n railroads", Moscow page 316, 1947.

SO: D-51514, 12 July 1954.

POVOROZHENKO, V. V.

Razvitie sovetskoi nauki - eksploatatsii zheleznykh dorog. The development of Soviet science - the exploitation of railroads. (Tekhnika zheleznykh dorog, 1948, no. 4, p. 1-6).

DLC: Slavic unclass.

SO: Soviet Transportation and Communications, A Bibliography, Library of Congress Reference Department, Washington, 1952, Unclassified

POVOROZHENKO, V. V.

Voprosy eksploatatsionnoi raboty v zimnikh usloviakh. [Questions of operation under winter conditions]. (Tekhnika zheleznykh dorog, 1947, no. 9, p. 8-11).

DLC: Slavic unclassified

SO: Soviet Transportation and Communications, A Bibliography, Library of Congress Reference Department, Washington, 1952, Unclassified.

POVOROZHENKO, V. V. and DOBROSEL'SKIY, K. M.

Organizatsiia dvizhenia poezdov na prifrontovnykh dorogakh. [Organization of train traffic on frontline railroads.] Moskva, Transzheldorizdat, 1943, 112 p.  
(Review in Zhel-dor. transport, 1943, no. 12 p. 95).

SO: Soviet Transportation and Communication, A Bibliography, Library of Congress Reference Department, Washington 1952 Unclassified



POVOROZHENKO, V. V. and PEISAKHIZON, B. YE.

30 let sovetskoi sistemy eksploatatsii zheleznkh dorog. [30 years of the Soviet system of railroad exploitation]. (Tekhnika zhel-dorog, 1947, no. 12, p. 1-6, illus).

LC: Slavic unclass

SO: Soviet Transportation and Communications, A Bibliography, Library of Congress Reference Department, Washington, 1952, Unclassified

POVOROZHENKO, V.V., doktor tekhn.nauk; ORLOVA, I.A., otv.red.;  
SOBOLEVA, N.M., tekhn.red.

[Prospects for improvement in the utilization of the rolling  
stock for freight transportation] Perspektivy uluchsheniia  
ispol'zovaniia podvizhnogo sostava zheleznykh dorog dlia  
gruzovykh perevozok. Moskva, Vses. in-t nauchn.i tekhn.  
informatsii, 1959. 81 p. (MIRA 13:2)  
(Railroads--Freight) (Railroads--Management)

POVROZHENKO, VLADIMIR VASIL'YEVICH

Organizatsiya Perevozok Nalivnykh Gruzov Na Zheleznodorozhnom Transporte.  
Moskva, Transzheldorizdat, 1951.

230 p. Diagr., tables.

Bibliography: p. 220-221.

POVOROZHENKO, V.V., prof., doktor tekhn.nauk; MOSHCHAL'KOV, A.S., inzh.

Advantages of the concentration of loading and unloading operations  
on approach tracks. Zhel.dor.transp. 43 no.10:72-80 1961.  
(MIRA 14:9)

(Loading and unloading) (Railroads--Freight)

POVOROZHENKO, V.V., prof., doktor tekhn.nauk; SHAFIRKIN, B.I., inzh.

Rhythm is an important condition for improvement in transportation operations. Zhel.dor.transp. 43 no.4:15-20 Ap '61. (NTR 14:3)

1. Zamestitel' nachal'nika Glavnogo gruzovogo upravleniya Ministerstva putey soobshcheniya (for Shafirkin).  
(Railroads--freight)

POVOROZHENKO, V. V. PROF

LA 2/49738

USSR/Engineering  
Railroads  
Railroads - Rolling Stock

Apr 48

"Development of Soviet Science - Operation of  
Railroads," Prof V. V. Povorozhenko, 6 pp

"Tekh Zhel Dor" No 4

General discussion of subject from end of 19th  
century to present. Particularly mentions  
technical planning and control of transpor-  
tation, use of rolling stock and locomotives,  
traffic capacity and graphs, theory of shunting,  
planning and organization of work of stations and  
junctions; freight work, and passenger conveyance.  
FDB 2/49738

POVOROZHENKO, V. V.

Oborot vagonov i puti ego uskoreniia. [Turnover of cars and ways of accelerating it]. Moskva, Gos. transp. zhel-dor, izd-vo. 107 p. (Ekonomicheskaiia bibliotekhka zheleznodorozhnika).

DLC: TF85.P6

SO: SOVIET TRANSPORTATION AND COMMUNICATIONS, A BIBLIOGRAPHY, Library of Congress Reference Department, Washington, 1953, Unclassified.

POVOROZHENKO, V. V.

Organizatsiia gruzovoi raboty na zheleznodorozhnom transporte. Perevozka gruzov.  
[Organization of freight handling on railroads. Freight shipment]. [Pod red.  
Grinevich, G. P.]. Utverzhen-no v kachestve uchebrika kha studentov vtuzov zhe-  
leznodorozhnogo transporta. Moskva, Gos. Transp. zhel-dor. izd-vo, 1947. 517 p. diagrs.  
(Favorable review in Zhel-dor. transport, 1948, no. 10, p. 93-95  
DLC: TF662.P6

Organizatsiia gruzovykh perevozok i kommercheskoi raboty na zheleznodorozhnom transporte  
SSSR. [Organization of freight transport and commercial operations on railroads of  
the USSR]. Moskva, Transzheldorizdat, 1951.

Organizatsiia perevozok nalivnykh gruzov na zheleznodorozhnom transporte. [Organization  
of shipments of liquid cargo in railroad transportation]. Moskva, Gos. Transp.  
zhel-dor. izd-vo, 1941. 207 p. illus "Spisok osnovnoi literatury": p. 200-201].  
DLC: TP692.5.P6

SO: Soviet Transportation and Communication, A Bibliography. Library of Congress  
Reference Department, Washington, 1952 Unclassified (Card 1 of 2)



POVOROZSENKO, V.

"Regularity of Labor, the Most Important Factor in Railroad Operation.  
Tr. From the Russian", P. 42, (KOZLEKEDESTUDOMANYI SZEMLE, Vol. 1, No. 2,  
Feb. 1954, Budapest, Hungary)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 3, No. 12,  
Dec. 1954, Uncl.

POVORCZHENKO, V. V.

The organization of the transportation of liquid cargo by railroad Moskva, Gos.  
transp. zhel-dor. izd-vo, 1941. 207 p. (50-40649)

TP692.5.P6

POVOROZHENKO, V.V., professor

Conditions for using through-train routing as a means of speeding  
up railroad car turnover. Tekh.zhel.dor.7 no.8:8-10 Ag'48.  
(Railroads--Cars) (MIRA 8:11)

POVOROZHENKO, V. V.

The organization of freight hauling and commercial operation in USSR rail transportation Moskva, Gos. tranep. zhel-dor. izd-vo, 1951. 385 p. (52-19076)

TF662.P615

POVORCZHENKO, V. V.

Methods of increasing rolling stock turnover Moskva, Gos. Transp. zhel-dor. izd-vo,  
1950. 107 p. (Ekonomicheskaya bibliotekha zheleznoyozhnyka) (50-55607)

TF85.P6

POVOROZHNIKO, V. V.

Loading and unloading at way stations without uncoupling railroad cars.

Moskva, Gos. transp. zhel-dor. izd-vo, 1946. 83 p. (49-15197)

TF662.P62

POVOROZHENKO, Vladimir Vasil'yevich, professor; PRIGOROVSKIY, P. P.,  
redaktor; KHITROV, P. A., tekhnicheskiy redaktor;

[Speeding up the movement of railroad cars] Uskorenie oborota vagonov.  
Moskva, Gos.transp.zhel-dor.izd-vo, 1955. 246 p. (MLRA 9:5)  
(Railroads--Traffic)

POVOROZHENKO, V.V., prof., doktor tekhn.nauk; MOSHCHALOV, A.S.,  
kand.tekhn.nauk

From abroad. Zhel.dor.transp. 47 no.12:83-89 D '65.  
(MIRA 18:12)



L 45279-66 EWT(1)/EEC(k)-2/T/EWP(k), IJP(c) WG

ACC NR: AP6030149

(A)

SOURCE CODE: UR/0120/66/000/004/0161/0164

AUTHOR: Povrozin, A. I.; Sidorov, A. I.

ORG: none

TITLE: Equipment for studying the Zeeman effect in a gas laser *15*

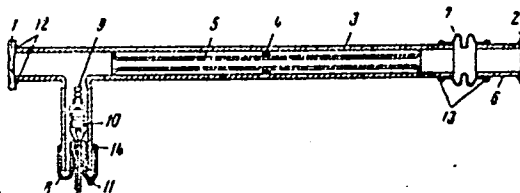
SOURCE: Pribory i tekhnika eksperimenta, no. 4, 1966, 161-164

TOPIC TAGS: Zeeman effect, gas laser

ABSTRACT: The design of a special internal-mirror He - Ne laser and its application to studying the Zeeman effect are described. Two spherical mirrors 1 and 2 having radii of curvature of 120 and 129.6 cm, respectively, form the laser resonator (see figure).

Mirror 1 consisting of 17 sprayed layers of ZnS alternating with MgF<sub>2</sub> has a transmissivity of 0.4%; mirror 2 has 11 layers and a transmissivity of 1.2%. Quartz tube 3 stabilizes mirror 1 mechanically and prevents its angular displacement upon heating of internal tube 5

by the discharge. Mirror 2 can be adjusted; slyphon 7 serves as an anode. All



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dimensions are given in the article. The above laser was placed in a magnetic field (up to 500 oe) produced by a solenoid, and its radiation was observed by a Nicol-prism-photomultiplier-oscilloscope system. With a longitudinal magnetic field and at a wavelength of  $6328 \text{ \AA}$ , the oscilloscope showed a sine wave whose frequency was equal to the difference of frequencies of the doublet line that represented the laser radiation. Seven oscillograms are shown. Orig. art. has: 4 figures. [03]

SUB CODE: 20 / SUBM DATE: 20Jun65 / ORIG REF: 002 / OTH REF: 006/ ATD PRESS: 5085

ACC NR: AP7002423

SOURCE CODE: UR/0051/66/021/006/0754/0758

AUTHOR: Povrozin, A. I.; Sidorov, A. I.

ORG: none

TITLE: The Zeeman effect in an Ne-He laser

SOURCE: Optika i spektroskopiya, v. 21, no. 6, 1966, 754-758

TOPIC TAGS: laser, gas laser, ~~Ne-He laser, Zeeman effect, laser~~ Zeeman effect

ABSTRACT: The findings of several Western authors (Bell and Bloom, Appl. Opt., 3, 1964, 431; Fork and Patel, Proc. IEEE, 52, no. 2, 1964; Gordon and White, ibid.) concerning the Zeeman effect in gas lasers were experimentally confirmed on an Ne-He laser with inner spherical mirrors (radii of 120 and 129.6 cm and transmission coefficients of 0.4 and 1.2%, respectively). The length of the resonator was 111.8 cm. The corresponding difference between the resonance frequencies working on the TEM<sub>0,0,q</sub> wave, was 134.4 Mc. The dependence of the frequency difference of the doublet of the emission beam on the intensity of the longitudinal magnetic field was experimentally investigated. The oscillograms showed, as expected, a widening between the beat frequencies (33 kc at 35 oe, 99 kc at 105 oe, 165 kc at 175 oe). Also, amplitude modulation was observed on the multiples of the above differential frequencies. The spectrum in the

Card 1/2

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presence of a magnetic field displays the usual picture of one central and two side peaks, the latter resulting from the superposition of waves with different polarizations. A periodic decrease of the beat amplitudes, observed when magnetic field strength was changed, was explained, in agreement with the theory, by a periodic coincidence of the Zeeman components with the resonant frequencies of the laser.

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Card 2/2