

S/120/60/000/005/044/051

E192/E382

AUTHORS: Garnov, V.V. and Dubovik, A.S.

TITLE: Projection on the Screen of the Photographs of ~~the~~
Ultrafast Photo-recording Equipment, Type СФР (SFR)

PERIODICAL: Pribory i tekhnika eksperimenta, 1960, No. 5,
pp. 141 - 143

TEXT: The ultrafast photo-recording equipment, type SFR (Ref. 1), is employed in the investigation of very rapid processes. However, the resulting photographs cannot be projected directly onto a screen due to the non-standard form of the pictures (frames) and their limited number. Consequently, a special equipment was constructed at the Institute of Chemical Physics of the AS USSR which makes it possible to obtain standard films from the photographs so that these can be projected onto a screen. An example of a photograph showing the explosion of a charge is given in Fig. 1; this was taken by means of the SFR equipment. The same picture photographed on a standard film is given in Fig. 2. The "converting" device is illustrated in Fig. 3. The operation of this system is as follows. A film from Card 1/4

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Projection on the Screen of the Photographs of Ultrafast Photo-recording Equipment, Type SFR

The SFR equipment 4 is illuminated by a device consisting of a lamp 1 and a condensing objective 2. The current of the lamp is controlled by a special variable resistance. The frames of the film 4 are situated in the focal plane of the objective 6 and are "reproduced" by the objective 8 in the focal plane of a projection camera, type "Rodina", where another film 11 is placed. The focusing of the optical system is achieved by displacing the objective 6. A shutter 7 is situated between objectives 6 and 8; this permits obtaining the exposure times up to 1/250 sec. The system is fitted with a diaphragm 5. When a frame is changed a mirror shutter closes the optical channel. The image of the frames situated on the film 4 is reconstructed on the grid of the sight 13 by means of the mirror shutter 9 and can be observed visually through the eyepiece 16. The sight with the grid permits setting of the successive pictures of the film 4 with an accuracy up to 0.01 mm.

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**Projection on the Screen of the Photographs of Ultrafast
Photo-recording Equipment, Type SFR**

After fixing a frame the shutter 7 is closed. The mirror shutter 9 opens the optical channel and the exposure of the frame is done by means of the shutter 7. The operation of the mirror shutter 9 is synchronised with the drive mechanism of the film 10. A prism 15 and a photo-resistor 14 are placed in the plane of the grid 13 and these operate as an exposure meter. By means of this device it is possible to determine the necessary exposure time for achieving uniform densities for various frames of the film. The photographic resolving power of the optical system of the equipment is 50 to 40 lines/mm. The projection of the resulting film has dimensions of 1.5 x 2 m and is effected by employing a projector type KД-3 (KD-3), which gives 24 frames/sec. Since the length of the film is small, it is necessary to arrange the film into a closed circle in order to obtain continuous projection.

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Projection on the Screen of the Photographs of Ultrafast
Photo-recording Equipment, Type SFR

There are 3 figures and 3 Soviet references.

ASSOCIATION: Institut khimicheskoy fiziki AN SSSR
(Institute of Chemical Physics of the AS USSR)

SUBMITTED: July 30, 1959

Card 4/4

23.1000

1138

89052

S/077/61/005/005/003/006
B019/B059

AUTHORS: Garnov, V. V., Dubovik, A. S.

TITLE: High-speed stereoscopic exposure and projection

PERIODICAL: Zhurnal nauchnoy i prikladnoy fotografii i kinematografii,
v. 5, no. 5, 1961, 356 - 360

TEXT: At the institute given under association, a method of high-speed stereoscopic exposure by means of an СОР(SFR) apparatus was developed. This method, in which an additional stereoscopic attachment is used, was suggested by G. L. Shnirman and A. S. Dubovik. Fig. 1 shows the optical scheme of this device with the stereoscopic attachment. As was described in earlier publications, the SFR device has a two- or four-channel recording system in order to reach faster recording. Exposure is made simultaneously with both or all four ray paths, respectively (Fig. 1). 12 000 to 300 000 pictures per second can be taken with a two-channel camera, and 50 000 to 1 250 000 with a four-channel camera. Stereoscopic investigations of explosions were made by I. I. Tamm by means of such a camera. These investigations led to new knowledge concerning the departure of the

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S/077/61/005/005/003/006
B019/B059

High-speed stereoscopic exposure...

explosion products. The pictures were projected by means of two synchronous projectors with the film having been re-copied to standard size. The stereoscopic attachment was devised at the Eksperimental'nyye masterskiye IKhF AN SSSR (Experimental Works of the IKhF AS USSR) under the supervision of design engineer Ye. A. Zaytsev. The major part of the experiments was made by the laboratory assistant V. V. Shauro. There are 4 figures and 5 Soviet-bloc references.

ASSOCIATION: Institut khimicheskoy fiziki Akademii nauk SSSR (Institute of Chemical Physics, Academy of Sciences USSR)

SUBMITTED: February 14, 1960

Card 2/3

89052

High-speed stereoscopic exposure...

S/077/61/005/005/003/006
B019/B059

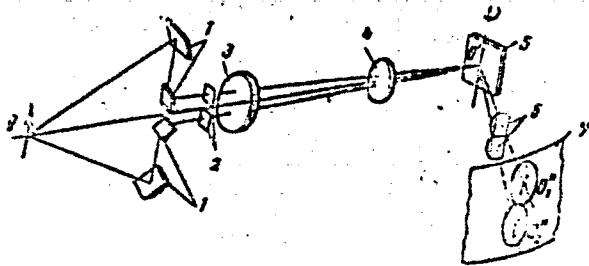


Fig. 1

X ✓

Legend: O denotes the object. 1) Periscopes; 2) aperture diaphragms;
3) objective; 4) collector; 5) revolving reflector; 6) small lenses.

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s/077/61/005/005/006/006
B019/B059

AUTHORS: Dubovik, A. S., Granigg, A. B.

TITLE: On the work of the Section for Photographic Recorders at the Second All-Union Conference on High-speed Photography and Cinematography

PERIODICAL: Zhurnal nauchnoy i prikladnoy fotografii i kinematografii, v. 5, no. 5, 1961, 397 - 400

TEXT: In the Sektsiya s"yemochnoy apparatury na vtorom vsesoyuznom soveshchanii po vysokoskorostnoy fotografii i kinematografii (Section for Photographic Recorders at the Second All-Union Conference on High-speed Photography and Cinematography), A. S. Dubovik (IKhF AS USSR) held a lecture on the mode of operation of a number of reflector compensators of film motion. A. B. Granigg, Ye. A. Tarantov, and I. I. Kryzhanovskiy read papers on problems of calculation and construction. Granigg (IKhF AS USSR) derived an equation which permits the calculation of the basic data of a camera, such as recording speed, light intensity, etc. Tarantov gave formulas for the calculation of the "dynamic resolution", for the calculation of the

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On the work of the Section for...

S/077/61/005/005/006/006
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picture shift during exposure, etc. Kryzhanovskiy made a report on a camera designed in the LITMO taking up to 500 000 pictures per second on a 16-mm film which can be used in a standard 16-mm projector. S. G. Orenishin and Yu. P. Shchepetkin (GOI) spoke on a new film transporter which operates smoothly. Inasmuch as the film is transported over drums. The design and manufacture of lens screens was discussed by S. P. Ivanov and L. V. Akimakina (NIKFI). O. F. Grebennikov, V. B. Gusev, and S. M. Provorov (LIKI) gave a report on a camera of the type PKC-11(RKS-11) with two lens screens which was worked out by them. L. A. Vasil'yev, L. A. Skuratova, and Ye. A. Tarantov investigated the use of screen cameras with dark-field and interference devices for gasdynamical investigations. V. V. Garnov and A. S. Dubovik (IKhF AS USSR) described the stereophotography by means of an CΦP (SFR) camera with 1 250 000 pictures per second. N. V. Sel'tsov (LAPOKI AS USSR) suggested some attachments and alterations of the CKC (SKS) camera, which should widen the field of application of this camera. The improvements concern control before and after picture taking, attachments for macrotakings and an enlargement of the diaphragm. There are 3 figures.

Card 2/2

DUBOVIK, A.S.; SITSIISKAYA, N.M.

Using High-speed cameras together with shadowing. Prib.1 tekh.eksp.
6 no.5:166-171 8-0 '61. (MIRA 14:10)

1. Institut khimicheskoy fiziki AN SSSR.
(Photography, High-speed)

DUBOVIE, A.S.

Theory of mirror scanning with inclined mirrors and inclined
light bundles. Zhur.nauch.i prikl.fot. i kin. 6 no.5:377-381
S-O '61. (MIRA 14:9)

1. Institut Khimicheskoy fiziki AN SSSR.
(Photography, High speed)
(Photographic optics)

"APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R000411410003-7

DUBOVIK, A. S., GRANICO, A. B.

"About the Determination of Sweep Centre and the Unequalness of the
Framing Rate in Framing Cameras with Commutating Mirror"

report presented at the 6th Intl. Cong. of High-Speed Photography,
The Hague, 17-22 Sep '62

APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R000411410003-7"

"APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R000411410003-7

DUBOVIK, A. S., SITSHINSKAYA, N. M., MOLESOV, G. V.

"High Speed Image Dissection Microphotographic Camera C 7P-7"

report presented at the 6th Intl. Cong. of High-Speed Photography,
The Hague, 17-22 Sep '62

APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R000411410003-7"

DUBOVIK, A.S.; GRAMICO, A.B.

Design and calculation of high-speed cameras with commutation of
the image. Zhur.nauch.i prikl.fot.i kin. 7 no.1:36-47 Ja-F
'62.
(MIRA 15:3)

1. Institut khimicheskoy fiziki AN SSSR.
(Cameras)

"APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R000411410003-7

SHTIRMAN, G. L., DUBOVIK, A. S., KVLICHENVILI, P. V., GRANICO, A. B. KORLOV, I. A.

"The High Speed No Dead-Time Framing Camera MAB-1"

report presented at the 6th Intl. Cong. of High-Speed Photography, The Hague,
17-22 Sep '62

APPROVED FOR RELEASE: 08/25/2000

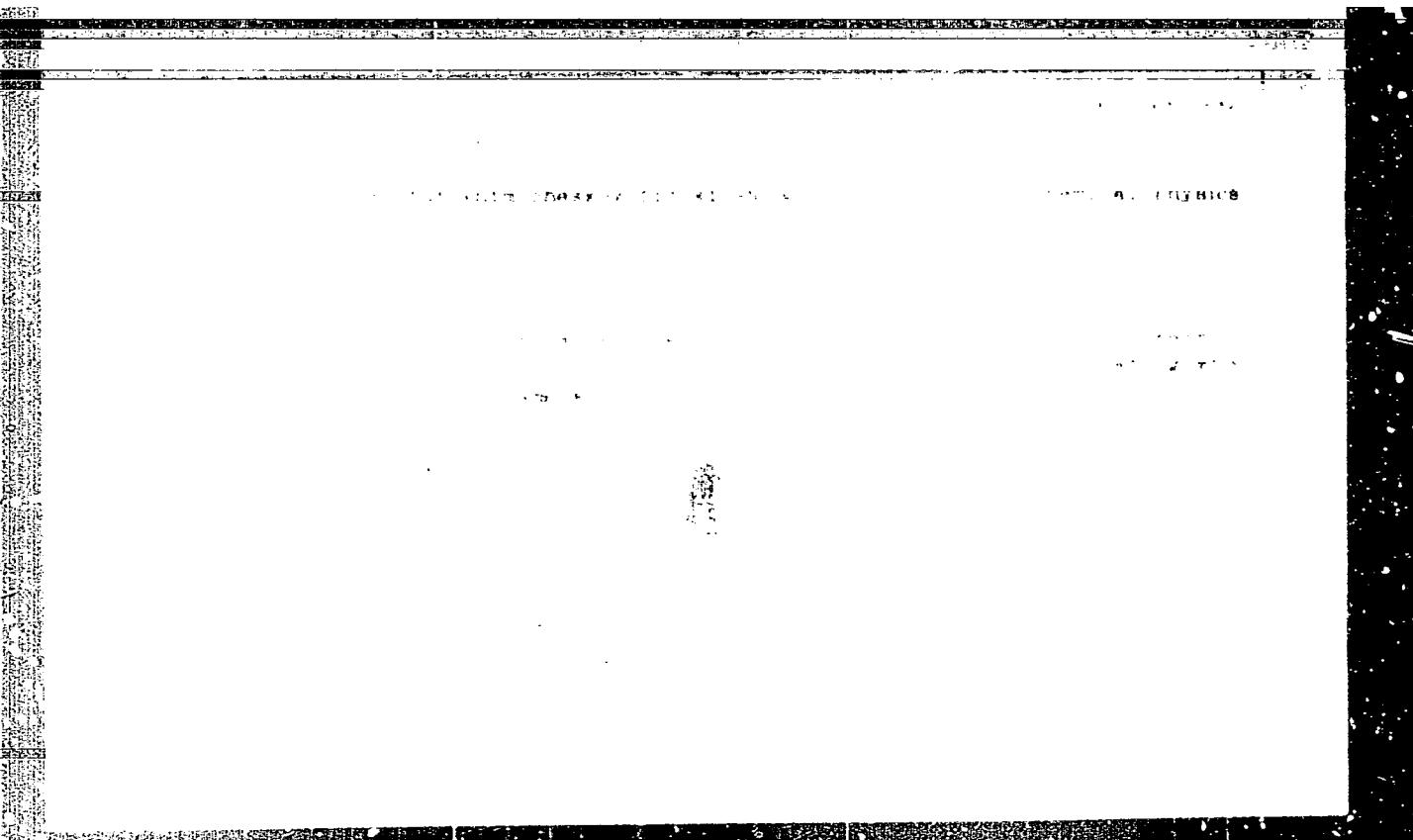
CIA-RDP86-00513R000411410003-7"

005/000

The device described here was developed from the high-speed photo-
graphy system. The original system was developed by the University of
California at Berkeley.

"APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R000411410003-7



APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R000411410003-7"

SHNIRMAN, G.L.; DUBOVIK, A.S.; KEVLESHVILI, P.V.; GRANIGG, A.B.;
MOROLEV, I.A.

High-speed "ZhLV-1" time lapse camera. Zhur.nauch.i prikl.
fot.i kin. 6 no.1:50-56 Ja-F '63. (MIRA 16:2)

1. Institut khimicheskoy fiziki AN SSSR.
(Cameras) (Photography, Time lapse)

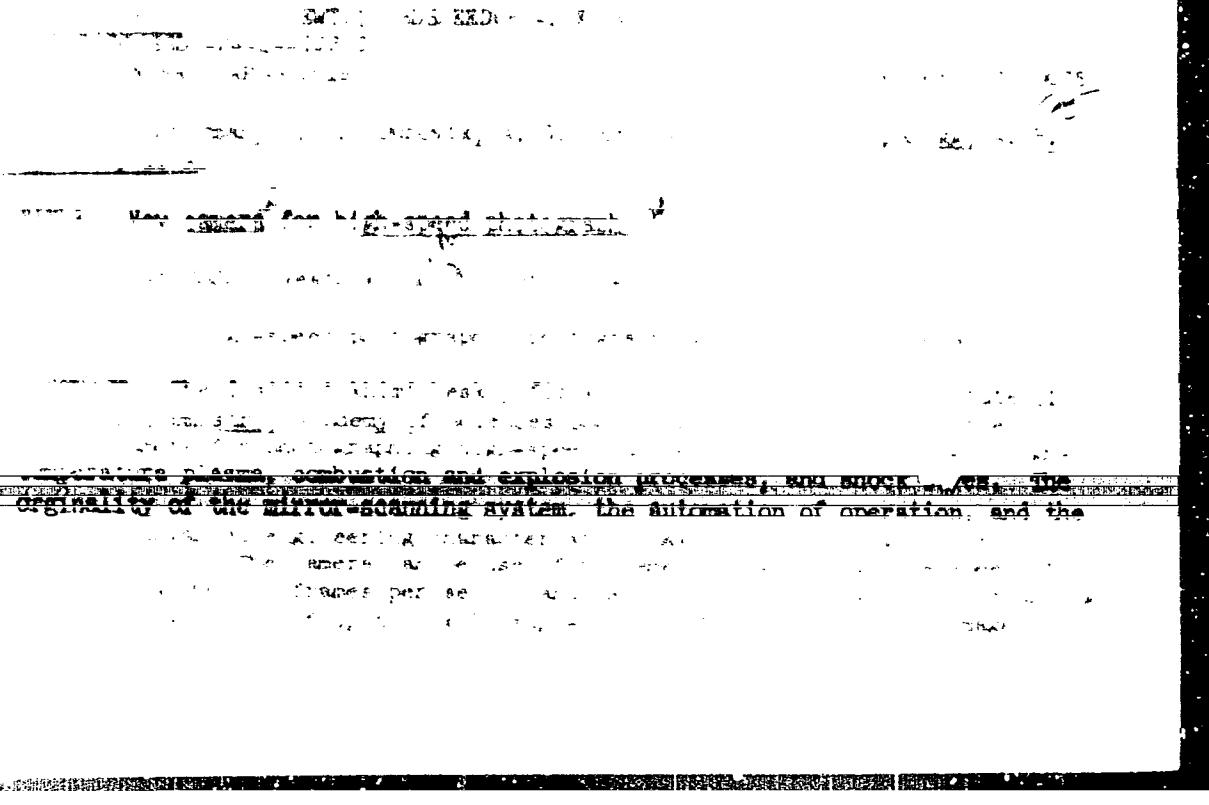
DUBOVIK, A.S.; SITSINSKAYA, N.M.; KOLESOV, G.V.

The "SFR-R"high-speed photomicrographic unit. Zhur.nauch. i prikl. fot. i
kin. 8 no.2:128-134 Mr-ap '63. (MIRA 16:3)

1. Institut khimicheskoy fiziki AN SSSR.
(Photomicrography—Equipment and supplies)

"APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R000411410003-7



APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R000411410003-7"

varied according to the experimental conditions. The focal

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Recording of high-speed processes (Fotograficheskaya registratsiya
sokushchikh processov), Moscow, Izd-vo "Nauka", 1971, 144 p.
U.S.S.R. 5,200 copies printed. Series note: Fotofotograficheskaya
literatura

High-speed photography, photographic equipment

ABOUT: This book is devoted to a description of methods of recording of high-speed processes and high-speed photographic equipment at present have been developed widely in research in a number of areas of physics and technology (plasma processes, explosion, jet flight, etc.). The monograph encompasses all the basic methods of registration of high-speed processes: theory and methods of equipment, equipment selection for specific problems, special methods of solving the physical processes of fast processes, etc. The book is intended for experimental physicists and optical engineers; it can be used by graduate students in higher technical educational institutions.

1000 723

+ quality in high-speed cameras -- 314
+ methods of photographic recording of high-speed processes
+ speed shadow and interference photography -- 315

+ speed shutters -- 408
+ speed drives for rotating mirrors -- 433
+ graphic materials used in high-speed photography -- 437
+ 498

1000

SUB CODE: OP, RS

OTHER: 312

ACCESSION NR: AP4026819

representing the number of exposures per unit time for 1 and 2 respectively. The frequency of stereopair formation h_{st} is then given by $h_{st} = \frac{1}{T_{ev}} = \frac{1}{k\ell_1} = \frac{1}{m\ell_2} = \frac{h_1}{k} = \frac{h_2}{m}$.

At pulsation points the time lag in synchronization Δt_p is

$$\Delta t_p = \frac{\ell_1 - \ell_2}{2(m-k)} = \frac{T_{ev}}{2mk} = \frac{\ell_1}{2m} - \frac{\ell_2}{2k} = \frac{1}{2mk\ell_1} - \frac{1}{2k\ell_2}$$

presented relating filming parameters to process speed. The independence of camera operation is emphasized by a schematic diagram. A test of the method was made by tracing the throw-out trajectories of soil during an underground explosion; accuracies between 1/600 and 1/800 were obtained for path coordinates. Stereometer SM-4 was used in this test. The use of a third camera in a high-speed process to provide a supplementary stereopair system is mentioned. Satisfaction of pulsation conditions is mainly dependent on stability of filming frequency. Analysis showed that a film speed of 100 exposures per second must be accompanied by a filming frequency accurate to 1% for good results. The authors thank N. M. Sitsinskaya for discussing the work. Orig. art. has: 12 equations and 4 figures.

ASSOCIATION: Institut khimicheskoy fiziki AN SSSR (Institute of Chemical Physics
AN SSSR)

2/3

Cord

ACCESSION NR: AP4026819

SUBMITTED: 03Jan63

SUB CODE: ES

NO REF SAV: 003

ENCL: 00

OTHER: 000

Card 3/3

"APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R000411410003-7

DUBOVIK, A.S.

Modern methods and equipment for the photographic recording of
rapid events. Zhur. nauch. i prikl. fot. i kin. 9 no.5:379-396
~~S-0-16~~ (MIRA 17:10)

APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R000411410003-7"

1 36828-66 SWI(1)/1 IJP(c)

ACC NR: AP6016937

(A)

SOURCE CODE: UR/0077/66/011/001/0033/0038

AUTHOR: Dubovik, A. S.; Gornov, V. V.

ORG: Institute of Physics of the Earth im. O. Yu. Schmidt, AN SSSR (Institut fiziki Zemli AN SSSR) 42
B

TITLE: State of the art and some developments in high-speed stereophotography 70

SOURCE: Zhurnal nauchnoy i prikladnoy fotografii i kinematografii, v. 11, no. 1.
1966, 33-38

TOPIC TAGS: stereoscopic photography, high-speed photography, motion picture photography, motion picture projector

ABSTRACT: This paper is a report on the present state of high-speed stereophotography as well as on developing trends in this field. High-speed stereoscopic photography is conditionally divided into two classes according to base length: 1. base length less than 1 meter; 2. base length greater than 1 meter. A single camera is generally used for the first class while the second ordinarily requires two cameras. Camera synchronization in the second case is accomplished either by mechanical methods or by remote control. The Institute of Physics of the Earth AN SSSR uses an installation with two AKS-2 cameras separated by a distance of 2 meters and mounted on a rigid base. This unit may be used for photography at 100 frames per second with an exposure time of

UDC: 778.4:778.37

Card 1/2

ACC NR: AP6017986

(N)

SOURCE CODE: UR/0413/66/000/010/0086/0086

INVENTOR: Bashilov, I. P.; Bulanshe, Yu. D.; Dubovik, A. S.; Yerofeyev, V. I.; Kevlishvili, P. V.; Kobrin, L. V.; Kogan, B. Ya.; Kaz'min, A. I.; Popov, Ye. I.; Mikhaylov, N. N.; Churbakov, A. I.; Shileyko, A. V.

ORG: None

TITLE: An automatic device for determining acceleration due to gravity on a movable base. Class 42, No. 181833 [announced by the Institute of Physics of the Earth imeni O. Yu. Schmidt, AN SSSR (Institut fiziki Zemli AN SSSR)]

SOURCE: Izobreteniya, promyshlennyye obraztsey, tovarnyye znaiki, no. 10, 1966, 86

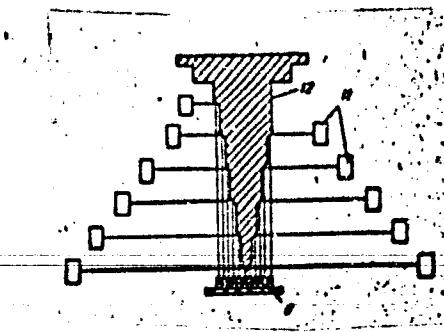
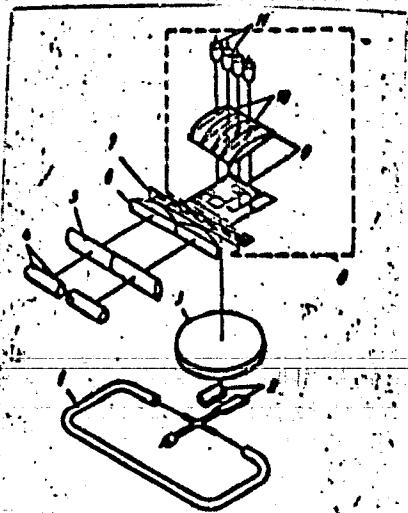
TOPIC TAGS: gravity, electron optics, electronic equipment, gravimeter

ABSTRACT: This Author's Certificate introduces an automatic device for determining acceleration due to gravity on a movable base, using a strongly damped elastic gravimeter system. The installation contains a meter for acceleration due to gravity, a system of mirrors, lens, light source, two condensers and a slotted prism. Accuracy of measurement is improved, and processing of the resultant information is automated by using an electron-optical converter which changes angles of turn of a pendulum to digital code. This converter is made in the form of a code mask with lenses attached. A prism is mounted behind the lenses with metallic mirrors and photocells.

Card 1/2

UDC: 531.768.08:528.026

ACC NR: AP6017985



1--accelerometer; 2--system of mirrors; 3--objective lens; 4--light source; 5 and 6--condensers; 7--slotted prism; 8--electron-optical converter; 9--code mask; 10--lenses; 11--photocells; 12--prism with metallic mirrors

SUB CODE: 09, 08/ SUBM DATE: 14 May 64

Card 2/2

ACC N^o: AP6026777

SOURCE CODE: UR/0077/66/011/003/0187/0190

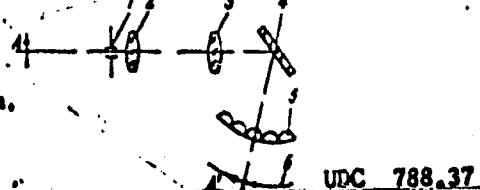
AUTHOR: Dubovik, A. S.; Sitsinskaya, N. M.

ORG: Institute of Earth Physics im. O.Yu. Schmidt ANSSSR (Institut fiziki zemli ANSSSR)

TITLE: High luminosity lens adaptor for the SFR system with unsymmetric objectives

SOURCE: Zhurnal nauchnoy i prikladnoy fotografii i kinematografii, v. 11, no. 3,
1966, 187-190TOPIC TAGS: optical equipment, high speed camera, high speed
camera adaptor, optical instrument/SRF high Speed cameraABSTRACT: The high luminosity multi-lens adaptor was developed at the Institute of
Earth Physics (IFZ) ANSSSR to increase the speed of the reliable and popular high
speed SFR photographic camera. The system is capable of registering from 25,000 to
2,500,000 images per second, at a high optical quality of the image. The adaptor ex-
tends the range of photography to subjects of lower brightness. The multilens adap-
tor, 6 , is shown in Fig. 1, which depicts the SFR system schematically. The high

Fig. 1. Schematic of the SFR system.



UDC 788.37

Card 1/3

ACC NR: AP6026777

luminosity adaptor version differs from the original one in that the objectives are not symmetric with respect to their optical axes and are located in contact with each other, permitting the design of a twice higher aperture diaphragm. In practice it was found possible with the new adaptor to increase the relative opening of the instrument from f 1/16.7 to f 1/114 without an increase of the light passage dimensions of the other optical components of the SFR system. The resolving power of the optical system has not been decreased and is determined, in the main, by the image shift in the mirror reflection development. Some additional advantages of the new multilens adaptor are cited, mainly in its applications to shadowgraphs and to interference images.

SUB CODE: 14, 17/ SUBM DATE: 23Dec64/ ORIG REF: 003/ OTH REF: 001

DUBOVIK, A.V.

Determining the amount of trash in beets. Sakhalin. prom. 30 no. 2:34 P
'56. (NIR 9:7)

1. Veselo-Pedolyanskiy sakharnyy zavod.
(Sugar beets)

DUBOVIK, A.V.

Assistance of agricultural agents to beet farms. Sakh.prom.30 no.3:
9 Mr '56. (MIDA 9:7)

1. Vasele-Fedelyanskiy sakharney saved.
(Sugar beets)

"APPROVED FOR RELEASE: 08/25/2000

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APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R000411410003-7"

measure, specimens (~ 1 mm thick and ~ 1 cm diameter) were impressed to a pressure of ~ 10 kg/cm² and detonated with a detonator. The detonation was registered through the Flexiplate. In addition, the detonation starting point was registered with a wire. Then, due to the increasing temperature, the specimen deforms. From the expanded volume of the reaction, the flame propagates in the radial direction. Owing to the high pressure, this leads to a rapid expansion of the reaction products between the detonation front and the propagating flame.

On the basis of the measured reaction times, the mechanical stability of the explosive materials can be determined. The following information can be obtained: detonation velocity, density, NSC, and the base of the explosive.

Various methods have been used to determine the propagation velocity of the flame front. One method is to photograph the propagation of the flame front at different points in time. The flame front is recorded by a camera. The distance between the camera and the reaction vessel is known. The time interval between two photographs is also known. The propagation velocity is calculated from the distance between the two photographs and the time interval.

A certain amount of energy is required to initiate an explosion. This energy is called the explosive energy. The explosive energy is measured in Joules (J).

explosives, nitroglycerin, low velocity detonation initiation mechanism, stability

Photographic studies of the low-velocity detonation of nitro-glycerin and nitro-glycerin in charges with cylindrical, spherical and rectangular shells were conducted to establish the mechanism of the low-velocity detonation of glycerin. The results showed that the initiation of detonation and the propagation of the detonation wave may be attributed to the formation of a shock wave formed during the detonation initiation. The weak impulse propagates in the shell with a much higher velocity (10,000 m/sec) than the detonation wave (800-1000 m/sec). The shock wave propagation in front of the detonation wave causes discontinuities (holes and gas bubbles) in the charge. These discontinuities decreased the sound velocity in air gaps to a value of 1500 m/sec. This is the mechanism of the low-velocity detonation of glycerin in shells of solid explosives. Orig. art. num. 411410003-7

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"APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R000411410003-7

BOBOLYEV, V.K. (Moskva); DUBOVIK, A.V. (Moskva)

Slow-speed propagation of an explosion in solids. PMTF no.2:150-
151 Mr-Apr '65. **(MIRA 18:7)**

APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R000411410003-7"

VINOGRADOVA, Ye.V.; GRINEV, A.N.; DANGSEVICH, I.K.; DAIK, M.F.; DUBOVIK, B.V.;
ZAKHAREVSKIY, A.S.; IL'YUCHENOK, T.E.; KOST, A.N.; MARTINOVICH, G.I.;
MINLEVICH, A.V.; PIL'TYENKO, L.F.; RACHKOVSKAYA, I.V.; REUT, N.A.;
TALAFIN, V.I.; TAMARINA, N.Z.; TERENT'YEV, A.P.; SHADURSKIY, K.S.

Research on pharmacological agents with prolonged hypotensive
action. Vest. AMN SSSR 18 no.1:69-86 '63. (MIR 16:2)

1. Laboratoriya spetsial'nogo organicheskogo sintesa khimicheskogo
fakul'teta Moskovskogo gosudarstvennogo universiteta imeni Lomonosova i kafedra farmakologii Minskogo meditsinskogo instituta.
(HYPOTENSION) (INDOLE)

DUBOVIK, D. V.

At the Dnepropetrovsk Mining Institute in Artem-Sergeev from April 1939 to April 1947, the following dissertations were defended in connection with attaining the scholarly degree of Candidate of Technical Sciences (specializing in mining electrical engineering). The late D. V. Dubovik on 28 June 1940 defended his dissertation on the subject "The use of low-power synchronous motors to drive mine machinery".

The official opponents of this dissertation were Candidate of Technical Sciences Docent I. T. Zherdev and Candidate of Technical Sciences Docent V. S. Rakitin.

The theoretical investigation was presented of the exciter circuit of low-power synchronous motors from a 50-cycle AC line (using cuprox and selenium rectifiers). The conclusions drawn were confirmed experimentally on oscillograms. Technical-economic indexes were derived for the operation of mine machinery with synchronous motors.

SO: Elektrichestvo [Electricity], No. 10, October 1947. Moscow.

"APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R000411410003-7

KAGANER, M.S.; DUBOVIK, E.I.

Evaporation from the water surface in the territory of the
Crimea. Trudy Ukr. NIGMI no. 46:63-73 1966.

(MTRA 12:1G)

APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R000411410003-7"

DUBOVIK, G.

Blood preservation and transfusion under rural conditions.
Probl. genet. i perel. krovi no.12:54-55 '62. (MIRA 16:8)

1. Iz Moldavskoy respublikanskoy stantsii prelivaniya krovi.
(BLOOD—COLLECTION AND PRESERVATION)
(BLOOD—TRANSFUSION)

"APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R000411410003-7

KNOTS, L.L.; DUROVIE, G.G.

Measurement of the contact difference of potentials by the
condenser-type method. Elektrokhimiia 1 no.5:507-511 My '65.
(MIRA 18:6)

1. Institut elektrokhimi AN SSSR.

APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R000411410003-7"

"APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R000411410003-7

DUBOVIK, G.G.

Types of black alder forests in the Belovezhskaya Pushina.
Bot., issl. Bel. otd. VBO no. 7:110-118 '65.

(MIRA 18:12)

APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R000411410003-7"

KNOTS, L.L.; DUBCHIK, O.G.

Technique of generating self-oscillations in a cell for
measuring the Volta potential difference by the condenser
method. Elektrokhimiia 1 no.7:788-793 J1 '65.

(MIRA 18:10)

1. Institut elektrokhimii AN SSSR.

DUBOVK, G.I.

KASAVINA, B.S.; DUBOVK, G.I.

Use of the preparation parenpit (hydrolysate of protein) in
traumatological clinic. Sov.med.19 no.10:77-80 O '55.

(MLRA 8:12)

1. Iz TSentral'nogo instituta travmatologii i ortopedii (dir.
chlen-korrespondent Akademii meditsinskikh nauk SSSR prof.
N.N.Priorov)

(PROTEINS,

hydrolysate, ther. use in traumatol.)

(WOUNDS AND INJURIES, therapy
protein hydrolysate)

"APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R000411410003-7

CHUKHOV, V.I. [Obukhau, V.I.]; DUBOVIK, G.P. [Dubovik, G.P.]

Use of a "Minsk-1" computer in solving the problem of selecting
the structure of a quasi-equilibrium bridge circuit. Vestsi AN
BSSR. Ser. fiz.-tekhn. nav. no.4:41-44 '63.

(MIRA 17:12)

APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R000411410003-7"

24.5280
S/058/67/000/008/020/044
A058/A101

AUTHOR: Dubovik, I. I., Klinger, V. G.

TITLE: The light transfer between mirror and diffusion surfaces

PERIODICAL: Referativnyy zhurnal, Fizika, no. 8, 1961, 176, Abstract 80195
(v sb. "Issled. protsessov perenosu. Vopr. teorii vynositel'nosti".
Alta-Ata, 1959, 97-100)

TEXT: On the model of light the author solves the problem of the radiant
transfer between two mirror surfaces and between a mirror and diffusion surface.

[Abstracter's note: Complete translation]

✓B

Card 1/1

DIRECTOR'S

PAGE 1 BOOK EXPENDITURE

007/2/93

Almaviva, Emanuele. *Universitaet.*

Socioeconomic Processes: Population Trends and their Relation to the Theory of Relativity (Series 1A) Almaviva, 1979, 256 p. Etwa 500 Exemplare.

Cooperating American Mathematical Institute Oberwolfach 8000 and Konstanz University (Series 1B) Etwa 1000 Exemplare.

National Bureau 7-3. Eschbauer, J. A., and F. A. Jevons. *Bangs-Ed.*

Lud. Verlag Sohn, Reihe 1-4.

BIBLIOGRAPHY: Table of contents of articles to be submitted for research publications and such documents. To date none have been submitted by institutions and students at universities.

CONTENTS: The article of this collection contains the results of 20 articles in mathematics, physics and the general theory of relativity made from 1956 to 1974 by the author of the booklet entitled "Festschrift 1. Internationaler Fischtel-Symposium der Mathematik und Physik" (Institute of General Physics and Mathematics, Univ. Karlsruhe). The articles are arranged in two groups. Group one contains 15 articles concerning the numerical analysis of the non-relativistic Schrödinger hamiltonian perturbative theory (Institute of Mathematics of General Physics) in the framework of the theory of finite differences or related topics and contains three articles concerning the solution of the equations of the theory of finite differences of the Schrödinger hamiltonian perturbative theory (Institute of General Physics and Mathematics, Univ. Karlsruhe). Group two contains 5 articles on the numerical solution of the equations of the Schrödinger hamiltonian perturbative theory, given a fairly detailed listing of the methods of numerical treatment of the equations of quantum mechanics and quantum theory. No generalizations are mentioned.

BIBLIOGRAPHY: Table of contents of articles of 1974 presented by James C. YOUNG, Jr. and V. L. KELLOGG, Jr. Simulation of High Pressure by James C. YOUNG, Jr. and V. L. KELLOGG, Jr.

CONTENTS: Table of contents of the book "Light Scattering Between Scatterer and Light Source" by R. H. Dicke and V. A. Elser. Light Scattering Between Scatterer and Light Source.

CONTENTS: Application of the Normal-Mode Approximation in the Calculation of the Correlation of Electrons in Liquid Crystals. *Progressive Report on the Correlation Function of Electrons in Liquid Crystals*.CONTENTS: 1. P. B. Bakeman. Relative Contributions of External Self-Interaction Potentials, *Adv.*, and V. A. Elser. *Relative London Polarization of One Water Molecule*.CONTENTS: V. A. Elser. *Interaction of a Three-Liquid ZnO/Al₂O₃/P₂O₅ System With a Porous Al₂O₃ Surface*.CONTENTS: V. A. Elser. Solution of the Equations of Density Functional Theory. *An Analytic Solution of the Equations of Density Functional Theory*.CONTENTS: V. A. Elser. Contribution to the Interpretation of the Thermal Conductivity of Inhomogeneous Probes. *Contribution, V. A. Elser, and V. A. Elser. *Contribution to the Interpretation of the Thermal Conductivity of Inhomogeneous Probes**.CONTENTS: V. A. Elser, and V. A. Elser. *Contribution to the Interpretation of the Thermal Conductivity of Inhomogeneous Probes*.CONTENTS: V. A. Elser, and V. A. Elser. *Contribution to the Interpretation of the Thermal Conductivity of Inhomogeneous Probes*.CONTENTS: *Contribution to the Interpretation of the Thermal Conductivity of Inhomogeneous Probes*.CONTENTS: V. A. Elser, and V. A. Elser. *Contribution to the Interpretation of the Thermal Conductivity of Inhomogeneous Probes*.CONTENTS: V. A. Elser, and V. A. Elser. *Contribution to the Interpretation of the Thermal Conductivity of Inhomogeneous Probes*.CONTENTS: V. A. Elser, and V. A. Elser. *Contribution to the Interpretation of the Thermal Conductivity of Inhomogeneous Probes*.CONTENTS: V. A. Elser, and V. A. Elser. *Contribution to the Interpretation of the Thermal Conductivity of Inhomogeneous Probes*.CONTENTS: V. A. Elser, and V. A. Elser. *Contribution to the Interpretation of the Thermal Conductivity of Inhomogeneous Probes*.CONTENTS: V. A. Elser, and V. A. Elser. *Contribution to the Interpretation of the Thermal Conductivity of Inhomogeneous Probes*.CONTENTS: V. A. Elser, and V. A. Elser. *Contribution to the Interpretation of the Thermal Conductivity of Inhomogeneous Probes*.CONTENTS: V. A. Elser, and V. A. Elser. *Contribution to the Interpretation of the Thermal Conductivity of Inhomogeneous Probes*.CONTENTS: V. A. Elser, and V. A. Elser. *Contribution to the Interpretation of the Thermal Conductivity of Inhomogeneous Probes*.CONTENTS: V. A. Elser, and V. A. Elser. *Contribution to the Interpretation of the Thermal Conductivity of Inhomogeneous Probes*.CONTENTS: V. A. Elser, and V. A. Elser. *Contribution to the Interpretation of the Thermal Conductivity of Inhomogeneous Probes*.CONTENTS: V. A. Elser, and V. A. Elser. *Contribution to the Interpretation of the Thermal Conductivity of Inhomogeneous Probes*.CONTENTS: V. A. Elser, and V. A. Elser. *Contribution to the Interpretation of the Thermal Conductivity of Inhomogeneous Probes*.CONTENTS: V. A. Elser, and V. A. Elser. *Contribution to the Interpretation of the Thermal Conductivity of Inhomogeneous Probes*.CONTENTS: V. A. Elser, and V. A. Elser. *Contribution to the Interpretation of the Thermal Conductivity of Inhomogeneous Probes*.CONTENTS: V. A. Elser, and V. A. Elser. *Contribution to the Interpretation of the Thermal Conductivity of Inhomogeneous Probes*.CONTENTS: V. A. Elser, and V. A. Elser. *Contribution to the Interpretation of the Thermal Conductivity of Inhomogeneous Probes*.CONTENTS: V. A. Elser, and V. A. Elser. *Contribution to the Interpretation of the Thermal Conductivity of Inhomogeneous Probes*.

DUBOVIK / M.

TIMOFEEVA, L.A.; ZHOVTIY, I.P.; BEKIPPOLOV, N.V.; BUSOYEKOVA, N.M.;
GOLOVACHEVA, V.Ya.; DUBOVIK, L.M.; DUBOVIK, V.I.; ZHIVOLYAPINA, R.R.;
LAMP'YEV, A.N.; PETUKHOVA, O.S.; TIMOFEEVA, A.A.; SHVED'KO, L.P.

Results of examining rodents in Transbaikalian steppes for pathogenic
microflora. Tez.i dokl.konf.Irk.gos.nauch.-issl.protivochum.inst.
no.1:38-39 '55. (MIRA 11:3)
(TRANSBAIKALIA--RODENTIA) (MICROORGANISMS, PATHOGENIC)

DUBROVSKY, Z.M.
TIMOFEEVA, L.A.; ZHOVETY, I.P.; NEKIPALOV, V.N.; GOLOVACHEVA, V.Ya.;
GORDIYMMKO, P.G.; ~~REBENOK, N.N.~~; KOROBYNNIKOVA, A.I.; MIRONOVA,
L.P.; MIRINOV, S.P.; SHVARDKO, L.P.; VASINOVICH, M.I.

Incidence of bacterial infections in steppe rodents of southeastern
Transbaikalia. Tez.i dokl.konf.Irk.gos.nauch.-issl.protivochum.
inst. no.2:63-65 '57. (MIRA 11:3)

(TRANSBAIKALIA--RODENTIA--DISEASES AND PESTS)
(BACTERIA PATHOGENIC)

LIPATEV, V.N. ; DUBOVIK, I.M.; DUBOVIK, V.I.; BOSOYEDOVA, N.M.

Rodents of the Argun River (Transbaikalia) flood lands. Irk.
Irk.gos.nauch.-issel.protivochum.inst. 16:39-55 '57.
(MIRA 13:7)

(ARGUN RIVER (TRANSPAIKALIA)--RODENTIA)

TIMOFEEVA, Z.A.; ZHOFTYY, I.P.; NIKIPELOV, N.V.; BUSOYEDOVA, N.M.;
GOLOVACHEVA, V.YA.; DUBOVIK, I.M.; DUBOVIK, V.I.; ZHIVOLYAPINA,
R.R.; LYOTTIY, A.N.; PETUKHOVA, O.I.; TIMOFEEVA, A.A.; SHVEIKO, L.P.

Search for plague and other epizootic diseases in Transbaikalian
plague focus. Report No.2. Izv. Irk.gos.nauch.-1951.Protivochum.
inst. 15:3-17 '57. (MIRA 13:?)
(TRANSBAIKALIA--RODENTIA--DISEASES AND PESTS)

BUSOYDOVA, N.M.; DUBOVIK, V.I.; DUBOVIK, I.M.; ZHOVYY, I.P.;
LIPATOV, V.M.

Fleas of rodents in the flood-lands of the Argun River (Trans-
baikalia). Inv. irt.gos.nauch.-issel.protivoochum.inst. 17:39-
46 '58. (MIRA 13:7)

(ARGUN RIVER (TRANSBAIKALIA)--FLEAS)
(PARASITES--BAIKALIA)

TIMOFEEVA, L.A.; ZHOVYY, I.P.; NEKIPSELOV, N.V.; GOLOVACHEVA, V.Ya.;
GORDIYENKO, G.P.; DUBOVIK, I.M.; KOROBETNIKOVA, A.I.; MIRONOVA,
I.P.; MERINOV, S.P.; MATAFONOVA, Z.O.; SHVEDKO, L.P.;
VASINOVICH, M.I.

Search for plague and other epizootic diseases in a Transbaikalian
plague focus. Report No.2. Izv. Irk.gos.nauch.-issl.protivochim.
inst. 20:3-13 '59. (MIRA 13:7)
(TRANSBAIKALIA--RODENTIA--DISEASES AND PESTS)

DUBOVIK, E.

Non-twisting wire ropes in mine hoisting. Mast.ugl. 2 no.12:17 D '53.
(MFA 6:11)

1. Nauchnyy otdrudnik Vsesoyuznogo nauchno-issledovatel'skogo instituta
organizatsii i mekhanizatsii shakhtnogo stroitel'stva.
(Wire rope) (Mine hoisting)

DUBOVIK, K. A.

"Investigation and Design of Non-twisting Circular Strands Underground Cables."
Cand Tech Sci, Moscow Mining Inst imeni Stalin, Min Higher Education USSR, Moscow,
1954. (KL, No 5, Jan 55)

Survey of Scientific and Technical Dissertations Defended at USSR Higher
Educational Institutions (12)
SO: Sum. No. 556, 24 Jun 55

SOV/124-57-7-8450

Translation from: Referativnyy zhurnal. Mekhanika, 1957, Nr 7, p 148 (USSR)

AUTHOR: Dubovik, K. A.

TITLE: On the Fundamentals of the Design and Manufacture of Twistproof Steel Cables (Ob osnovakh rascheta i konstruirovaniya nektrutya-shchikhsya stal'nykh kanatov)

PERIODICAL: V sb.: Metallnoye proiz-vо. Nr 1, Moscow, Metallurgizdat, 1955,
pp 153-166

ABSTRACT: The author criticizes the theoretical bases for the design of twist-proof wire-strand cables proposed by S. T. Sergeyev (RZhMekh, 1955, abstract 3309). Included are data on industrial practice with respect to the manufacture of cables.

G. N. Savin

Card 1/1

DUROVIK, K.A.

High-strength covered hoisting cables. Biul. tekhn. ekon. inform.
no.9:15-16 '59. (MIRA 13:3)
(Mine hoisting) (Cables)

DUBOVIK, K.A., kand.tekhn.nauk

New hoisting ropes with locked-coil structure. Ugol'
Ukr. 4 no.5:31-33 My '60. (MIRA 13:8)
(Hoisting machinery)
(Wire ropes)

DUBOVIK, Konstantin Aganovich; MED'KOV, B.V., otv. red.;
ABARBARCHUK, P.I., red. iad-va; SHALIAR, S.Ya., tekhn.
red.

[Increase in the service life of hoisting ropes] Povyshenie
sroka sluzhby podzemnykh kanatov. Moskva, Gos-
portekhnizdat, 1962. 88 p. (MIRA 161?)
(Mine rope)

"APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R000411410003-7

PAVLYUCHENKO, N.N.; AKHIEVICH, V.M.; ~~DEROVSKA, K.V.~~; BULYGO, N.N.

Microelements (B,Mn,Sr,Zn) and their quantitative spectrum determina-
tion in salts of Starobin deposits. Sbor. nauch. rab. Inst. khim. AN
SSSR no.6:102-114 '58. (MIRA-11:11)

(Trace element spectra) (Starobin-Potassium salts)

APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R000411410003-7"

DUBOVIK, K. V., N. N. BULYGO, M. M. PAVLICHENKO, and V. M. AKULOVICH

"Trace Elements (B, Mn, Sr, Zn) in Salts of Starobinskoye mestorozhdeniye (Deposit) and Their Quantitative Spectrum Analysis" p. 102

Sbornik nauchnykh rabot, vyp. 6 (Collection of Scientific Works of the Institute of Chemistry, Belorussian SSR Academy of Sciences, No. 6) Minsk, Izd-vo AN Belorusskoy SSR, 1958, 271 pp.

S/713/60/000/001/003/005
D204/D303

AUTHORS: Pavlyuchenko, M.M., Dabovik, K.V. and Pikulik, V.A.

TITLE: Spectrochemical determination of the rare earths in phosphorus-containing raw materials

SOURCE: Akademiia nauk BSSR, Minsk, Institut obshchey i neorganicheskoy khimii. Sbornik nauchnykh rabot. no. 1, Minsk, 1960, 43 - 50

TEXT: The present work was aimed at determining the rare earths in a number of apatites and phosphorites by spectrochemical methods, as these are believed more promising than the conventional ones. For qualitative estimation, the samples were mixed with powdered carbon (1:1 ratio) and the spectra were photographed on the VU-51 (ISP-51) spectrograph, using the VU-64 (UF-64) camera, in the 3900 - 4500 Å region. Experimentally details are given. La, Y, Yb, Cd and Nd were found in the apatites and in one phosphorite, whilst the remaining phosphorites required chemical concentration before the spectroscopic analysis. All the lanthanons were detected. For the quantitative

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S/713/60/000/001/003/005

D204/D303

Spectrochemical determination ...

analyses the lanthanons were first concentrated, using the oxalate method. This is described in some detail. The precipitation of oxalates should be conducted in neutral rather than acid medium to avoid losses. CaCl_2 was added to act as a precipitate carrier. Analysis calibration curves were first constructed with 8 specimens of known compositions. The samples were mixed with powdered carbon (1:2 ratio) to which Zr had been added to act as an internal standard. The following pairs of lines were used for the analysis: La 3988.50 - Zr 3991.13, ✓
Y 3982.60 - Zr 3991.13, Yb 3987.99 - Zr 3991.13 and Ce 3952.54 - Zr 3958.22. The results were reproducible to 5 - 8 %. Yttrium was also determined, with 10 - 12 % accuracy, by the method of additions, using Gd as an internal standard (the pair Y 4374.94 - Gd 4374.64). The method of calculation is given. Cerium was also determined chemically in the apatites. Results of the different methods are tabulated. The total lanthanon contents were 0.4 - 1.2 % in the apatites and 0.07 - 0.6 % in the phosphorites, depending on the deposits. There are 2 figures, 3 tables and 19 references: 12 Soviet-bloc and 7 non-Soviet-bloc.

Card 2/3

S/713/60/000/001/003/005
D204/D303

Spectrochemical determination ...

The references to the English-language publications read as follows:
J. Hackers and H. Kremers, J. Am. Chem. Soc., 50, 950, (1928); L. Sarver
and P. Brinton, J. Am. Chem. Soc., 49, 943, (1927)

Card 3/3

"APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R000411410003-7

PAVLYUCHENKO, M.M.; DUBOVIK, K.V.

Intensity of the spectral lines of trace elements and the state
diagram of the system. Zhur. anal.khim. 18 no.12;1426-1431
D '63. (MIRA 17:4)

1. Institut obshchey i neorganicheskoy khimii AN BSSR, Minsk.

APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R000411410003-7"

PAVLYUCHENKO, M.M., akademik; DUBOVIK, K.V.

Intensity of spectral lines of trace elements in a silicate system as dependent on its equilibrium diagram. Dokl. AN SSSR 149 no. 5:1088-1090 Ap '63. (MIRA 16:5)

1. Institut obshchey i neorganicheskoy khimii AN Belorussskoy SSR.
2. AN Belorussskoy SSR (for Pavlyuchenko).
(Silicates) (Spectrum analysis) (Phase rule and equilibrium)

DUBOVIK, K.V. i PAVLYUCHENKO, M.M.

Study of the supply of elements from a mixture of oxides by
means of reabsorption. Zhur. anal. khim. 20 no. 11:1174-1179
'65 (MIRA 1981)

1. Institut obshchey i neorganicheskoy khimii AN BSSR, Minsk.
Submitted April 27, 1964.

11.22.11 also 2209

20862

S/138/61/000/001/006

A051/A129

AUTHORS: Reykh, V. N.; Kalaus, A. Ye.; Boguslavskiy, D. B.; Opalev, A. I.; Dubovik, L. I.; Borodushkina, Eh. N., and Fedorova, Yu. I.

TITLE: Ternary copolymers of butadiene, styrene and 2-methyl-5-vinyl-pyridine

PERIODICAL: Kauchuk i rezina, no. 3, 1961, 2-8

TEXT: The technical properties, including wear-resistance, of butadiene-styrene polymers can be improved by introducing links containing functional groups into the polymer chain. The main shortcomings of the copolymers with 2-methyl-5-vinylpyridine are their poor compatibility with other polymers hampering the achievement of satisfactory tensility of the protector rubber bond with the breaker rubber and a high tendency of the mixtures based on double copolymers to scorching. The present article studies the initial materials and the technical properties of ternary copolymers, development of a formulation on its base and the results on industrial tests of protector rubbers of a new type. Ternary copolymers of butadiene, styrene and 2-methyl-

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20862

S/138/61/W00/W03/W01/W06

AU51/A129

Ternary copolymers of...

5-vinylpyridine were synthesized on the base of a polymerization formulation adopted for CKC-30A (SKS-30A). The effect of 2-methyl-5-vinylpyridine on the main physico-mechanical properties of vulcanizates was studied and it was found that the ternary copolymers varied depending on the 2-methyl-5-vinylpyridine content (Table 1). They were found to have a higher tensility index and elasticity as compared to rubbers based on the ternary copolymer with -methylstyrene. The copolymers of butadiene, styrene and 2-methyl-5-pyridine produced at the ratio of the monomers of 70:25:5 have the most promising properties. Rubbers produced on a CKC-25 MB45 (SKS-25 MVP-5) base with gaseous channel and anthracene carbon blacks are superior to similar rubbers based on butadiene-styrene rubber in their wear-resistance and resistance to crack growth in repeated deformations. The formulations of the protector rubbers based on SKS-25 MVP-5 material were developed and an experimental batch of tire casings 5,00 - 16 in size to be used for service tests were manufactured. Table 2 shows the results of the physico-mechanical testing of vulcanizates based on SKS-25 MVP-5 and SKMVP-15A, SKS-30A, SKS-30AM for comparison. The important advantage of butadiene, styrene and 2-methyl-5-vinylpyridine copolymers is said to be the high stability to scorching at elevated temperatures.

Card 2/

20862

S/138/61/000/003/006

A051/A129

Ternary copolymers of...

(Fig. 1). The effect of certain vulcanizing agents, such as zinc oxide, magnesium oxide, sulfur, as well as certain accelerators, was investigated (Table 3, Fig. 2). The change in the main properties of the vulcanizates depending on the type and amount of carbon black is shown in Figure 3. The noted characteristics of the vulcanizates based on methylvinylpyridine rubbers are thought to be connected with the intensified interaction between the active functional groups in the molecular chain of the copolymer and the carbon black particles, on the surface of which compounds of an acidic nature are adsorbed. In studying the effect of the different softeners, e. g., standard mixtures of rubrax, fuel oil, avtoi-18, extract of the phenol purification of petroleum oils, stearin, fatty acids, pine resin and polydienes on the plasto-elastic and physico-mechanical properties, it was seen that the extract of the phenol purification of petroleum oils (M-6, PN-6) has the best effect on these properties. Experimental work was carried out to increase the strength of adhesion between the NR breaker tires and the SKS-25 MVP-5 treads by using double-layer treads, where the road rubber contained SKS-25 MVP-5 and the sub-groove rubber SKS-30ARM. The experimental data showed that the fixing of the methylvinylpyridine tread to the NR breaker through a sub-groove layer made of butadiene-styrene rubber ensures a

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20862

Ternary copolymers of...

S/139/61/000/003/001/006
A051/A129

high strength of adhesion of the doubled system. There are 6 tables, 3 sets of graphs, 9 references: 5 Soviet, 3 English, 1 German.

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy institut sinteticheskogo kauchuka im. S. V. Lebedeva i Yaroslavskiy shinnyy zavod (All-Union Scientific Research Institute of Synthetic Rubber im. S. V. Lebedev and the Yaroslavl Tire Plant)

Card 1/

REIKH, V.N.; KALAUS, A.Ye.; BOGUSLAVSKIY, D.B.; OPALEV, A.I.; DUBOVIK, L.I.
BORODUSHKINA, Kh.N.; FEDOROVA, Yu.I; Prinimali uchastiye: PAVLIKOVА, A.;
KHUDZINSKAYA, L.L.

Triple copolymers of butadiene, styrene, and 2-methyl-t-vinylpyridine.
Kauch. i res. 20 no.3:2-8 Mr '61. (MIRA 14:3)

1. Vsesoyuznyy kauchukosintezatskiy institut sinteticheskogo
kauchuka im. S. V. Lebedeva i Yaroslavskiy shinnyy zavod.
(Rubber, Synthetic) (Butadiene) (Pyridine)

"APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R000411410003-7

KOROL', F., insh.; DUBOVIK, M., insh.

Power plant. Grashd. av. 15 no. 8:14-16 Ag '58.
(Airplanes)

(MIRA 11:9)

APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R000411410003-7"

L 15587-66 SM(1)/T IJP(e) 00
L 98 AP6004410

~~Artyukhova, N. K.; Dubovik, N. F.; Rybkin, Yu. F.; Sazonova, S. A.; Skoroboga-~~

TITLE: A method for producing lanthanon-activated cadmium fluoride crystals and an investigation of their luminescence

SOURCE: Optika i spektroskopiya, v. 10, no. 1, 1962, p. 100

TOPIC TAGS: calcium fluoride, cadmium compound, lanthanon, lanthanon element, luminescence, optical properties

L 19562-66

ACC NR: A20004410

O

and at the end. This indicates decomposition of excess rare earth fluoride. The decomposition is very slow at first.

0.001 M for CdF₂ crystals with NdF₃ and 0.2 mol % for crystals with the other lan-

thanum ions Pr, Dy and Tb. A comparison of the luminescence spectra for these ions in cadmium fluoride and calcium fluoride crystals shows that in spite of the identical types of lattice and the close parameters, the behavior of rare earth ions in these crystals has very little in common. This is emphasized particularly in the luminescence spectra for trivalent Pr, Dy and Tb and in the absence of luminescence for Eu²⁺. The difference between these two materials is quite remarkable.

Figures.

SUB CODE: 20/ SUBM DATE: 30Jul84/ ORIG REF: 002/ OTH REF: 008

S/181/62/004/012/008/052
B104/B102

AUTHORS: Pines, B. Ya., Kuznetsova, R. I., and Dubovik, M. F.

TITLE: Development of submicroporosity in composite electrolytic films of the Cu - Ni system during heating and loading

PERIODICAL: Fizika tverdogo tela, v. 4, no. 12, 1962, 3409-3414

TEXT: The scattering of X-rays at small angles and the kinetics of the destruction of thin electrolytic films of pure metals (Cu, Ni, Fe) were investigated in continuation of previous studies (B. Ya. Pines, R. I. Kuznetsova, FTT, 3, 1475, 1951; 4, no. 5, 1962). The change of submicroporosity in Cu-Ni films during annealing at different temperatures without and with load (230 g/mm^2) was studied by means of X-ray scattering. A copper film was electrolytically deposited on a polished steel plate, then separated from the plate, annealed and electrolytically coated on both sides with nickel. The total thickness of specimen 1 (17μ) was composed of 85% Cu film and 15% Ni films, and that of specimen 2 of 50% Cu film. Results: a maximum volume of pores was found in the films, exceeding that of single component films by one order of magnitude. This

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Development of submicroporosity ...

S/181/62/004/012/008/052
B104/B102

is explained by additional formation of pores through nonuniform partial heterodiffusion (Frenkel' effect of first kind). Under annealing at 1100°C, submicroporosity in the unloaded state increases at first, passes through a maximum and then drops. Annealing under load always leads to an increase in submicroporosity; the higher the annealing temperature, the bigger the increase. The development of submicroporosity in consequence of heterodiffusion leads to a noticeable reduction of the heat resistance offered by the composite Cu-Ni films. The amount of this reduction is determined not only by the total volume of the pores but also by their distribution in the film. There are 3 figures and 1 table.

ASSOCIATION: Khar'kovskiy gosudarstvennyy universitet im. A.M. Gor'kogo
(Khar'kov State University imeni A. M. Gor'kiy)

SUBMITTED: July 2, 1962

Card 2/2

ACC NR: A9600726

SOURCE FILE #

1. Discovery of Eu^{3+} in cadmium

2. Spectroscopy, p. v. 20, no. 2, 1956, 371-374

TOPIC THIS: luminescence, activated crystal, cadmium compound, glass-ceramic, laser, etc.

ABSTRACT: In view of the possible use of suitably prepared $\text{CdF}_2\text{-Eu}^{3+}$ crystals as active media for lasers, the authors have investigated the luminescence properties of the formation centers in various types of glass, ceramic, and glass-ceramic

SUPPLY DATE: 12/04/86 ORIG REF: 003/ OTH REF: 004

DUBOVIK, M.M.

Gold in the beds of Adyche River, Siberia. M. M.
Dobrovik. Sovet. Zolotoznam. 1957, No. 6-7, 30 p. The
river runs along Adyche River, a tributary of Uana
River, about 210 km. S-E of Verkhoyansk. A prelimi-
nary investigation showed the existence of Au. S. [..] M.

AIA-518 METALLURGICAL LITERATURE CLASSIFICATION

1950-1959 1960-1969 1970-1979

L 45164-66 EWT(1)/EEG(X)-2/T/IMP(E) IJP(c) M3
ACC NR: AP6027998

SOURCE CODE: UR/0368/66/005/001/0045/0050

55
54
B

AUTHOR: Dubovik, M. V.; Smirnov, A. Ya.; Borisovich, N. A.

ORG: none

TITLE: Three-pulse generation of a helium-neon laser 75

SOURCE: Zhurnal prikladnoy spektroskopii, v. 5, no. 1, 1966, 45-50

TOPIC TAGS: gaseous ^{SYNTH} laser, helium neon laser, LASER PULSATION, HELIUM, NEON

ABSTRACT: Three generation pulses were obtained in an He-Ne mixture during one excitation pulse. An investigation is made of the dependence of the parameters of these pulses on the amplitude and duration of the excitation pulse and the partial and total pressure of the mixture. The relationship between generation pulses, the structure of the laser beam spot, and the distribution of the discharge brightness along the diameter of the tube is established. The three-pulse generation is studied from the viewpoint of the inverse population mechanisms of the working 2s-2p levels. The authors observed, during a single excitation pulse, three generation pulses appearing correspondingly during the excitation pulse (the first generation pulse), immediately after it (the second), and far into the afterglow (the third) at 11523 Å.

UDC: 621.375.9

cont 1/2

SHOSTAKOVSKIY, M.P., KUZNETSOV, N.V.; DUBOVIK, V.A.; ZIXHERMAN, K.E.

Synthesis of ethoxycetalaldehyde and its chemical transformations.
Inv. AN SSSR. Otd.khim.nauk no.8:1495-1500 Ag '61.

1. Irkutskiy institut organicheskoy khimii Sibirsogo otdeleniya
AN SSSR.

(Acetaldehyde)

8/08/62/000/017/049/102
B158/B186

AUTHORS: Kalabina, A. V., Dubovik, N. A.

TITLE: Synthesis of certain chlorine anhydrides and β -arylhydroxy-vinylphosphinic esters

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 17, 1962, 258, abstract 172h337 (Izv. Fiz.-khim. n.-i. in-ta pri Irkutskom un-tse, v. 5, no. 1, 1961, 131-140)

TEXT: By reacting $\text{ArOCH}=\text{CH}_2$ (I) with PCl_5 , with the subsequent action of SO_2 , $\text{ArOCH}=\text{CHP(O)Cl}_2$ (II) is obtained; this is converted to $\text{ArOCH}=\text{CHP(O)(OR)}_2$ (IIIa-b, where a R = CH_3 , b R = C_2H_5) which has insecticidal properties. Cresole and xylene fractions of a resin obtained by semicooking Chereakhovo coals may also be used as I. 0.112 mole of I ($\text{Ar} = m\text{-CH}_3\text{OC}_6\text{H}_4$) is added to a mixture of 0.23 mole PCl_5 and 100 ml C_6H_6 with thorough shaking; SO_2 is passed through and 14.98 g II ($\text{Ar} = m\text{-CH}_3\text{OC}_6\text{H}_4$) is separated. 0.052 mole of II ($\text{Ar} = m\text{-CH}_3\text{C}_6\text{H}_4$) is

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Synthesis of certain chlorine...

S/081/62/000/017/049/102
B158/B186

added with cooling to a solution of 0.099 mole absolute alcohol and 8.1 moles C_5H_8N in 40 ml C_6H_6 ; this is then heated for 2 hours at 60-70°C, the filtrate shaken with calcined K_2CO_3 and 6 g IIIb is separated. The Ar, b.p. in °C/mm, n_D^{20} and d_4^{20} are given for II: m- $CH_3C_6H_4$, 178-179/12 (154/3), 1.5650, 1.3252; o- $CH_3C_6H_4$, 172/11, 1.5610, 1.3252; $CH_3C_6H_4$, 145-184/10, 1.5638, 1.3297; ($CH_3)_2C_6H_3$, 180-204/13, 1.5610, 1.3041; for IIIb: m- $CH_3C_6H_4$, 189-190/10, 1.5085, 1.1126; o- $CH_3C_6H_4$, 172.5-174/4, 1.5057, 1.1146; $CH_3C_6H_4$, 185-193/10, 1.5085, 1.1180; ($CH_3)_2C_6H_3$, 150-199/9, 1.5072, 1.0998; for IIIa: $CH_3C_6H_4$, 180-193/10, 1.5224, 1.1743; ($CH_3)_2C_6H_3$, 170-179/6, 1.5182, 1.1600. [Abstracter's note: Complete translation.]

Card 2/2

DUBOVIK, N.P.

Section of volunteer specialists in the Division. Put' i put.
khcs. 9 no.9:15 '65. (MIRA 18:9)

1. Pomoshchnik uchastkovogo revisora po bezopasnosti dvizheniya,
stantsiya Popasnaya, Donetskoy dorogi.

DUBOVIK, N.P.

Quantitative and qualitative changes in erythropoiesis in acute pneumonia in young children. Vop. okh. mat. i det. 4 no. 5:50-56
S-O '59. (MIRA 13:1)

1. Is genetologicheskoy laboratorii (kav. - prof. O.P. Grigorova)
Gosudarstvennogo nauchno-issledovatel'skogo pediatriceskogo instituta Ministerstva zdravookhraneniya RSFSR (ispolnyayushchiy obyazannosti direktora - kand. med. nauk A.P. Chernikova, zamestitel' direktora po nauchnoy chasti - prof. N.R. Shastin).
(ERYTHROCYTES) (PNEUMONIA)

DUBOVIK, N.P.

Change in the functional state of the monocytic system during the
course of acute pneumonia in infants. Vop.ohh.mat.i det. 7 no.78
13-18 Jl '62.
(MIRA 15:11)

1. Iz gemitologicheskoy laboratorii (zav. - prof. O.P. Grigoreva)
Nauchno-issledovatel'skogo pediatriceskogo instituta (dir. -
doktor med. nauk A.P. Chernikova) Ministerstva zdravookhraneniya
RSFSR.

(PNEUMONIA)

(LEUCOCYTES)

DUDOVIC, N.O.

Invagination of the small intestine into the stomach through a
gastroenterostomy opening. Khirurgia no.4:79-80 Ap '55.
(MLRA 8:9)

1. Aremashevskaya rayonnaya bol'snitsa Tiumenskoy oblasti)
(STOMACH—SURGERY) (INTESTINES—INTUSSUSCEPTION)

"APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R000411410003-7

DUBOVIK, N.G.

Industrial traumatism in the Kondinskoye Logging Combine in the
Tyumen' Province. Ortop., trav.m protok. 24 no.9:32-37 S
'63. (MIRA 17:4)

1. Adres avtora: Tyumen', Oblastnaya bol'nitsa.

APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R000411410003-7"

DUBOVIK, N.G.

DUBOVIK, N.G.

Anesthesia with 0.1% novocaine solution. Sov.med. 22 no.3:127
Mr '58. (MIRA 11:4)

1. Glavnnyy vrach Zavodoukovskogotuberkulosnogo sanatoriya
Tyumenakoy oblasti.
(PROCAINE, anesth. & analgesia
0.1% solution, evaluation (Rus))

"APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R000411410003-7

ZAKHARENKO, I.P., kand. tekhn. nauk; DUBOVIK, N.P., inzh.; ROZENBERG, O.A., inzh.

Technology of diamond machining of hard-alloy rings for planing
broaches. Mashinostrroenie no.5315-17 S.O '65. (MIRA 18:5)

APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R000411410003-7"

"APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R000411410003-7

OVCHAROV, V.P., kand. tekhn. nauk; DUBOVIK, N.G., inzh.

Studying the wear resistance of engineering cast irons processed
in a steam atmosphere. Trudy MIFT no.76:41-53 '65. (MIRA 18:9)

APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R000411410003-7"

DUBOVIK, O.N. [Dobrovik]-O.N. +

A survey of the Donets forest-steppe flora. Report No.2: Endemic
and vicarious species. Ukr. bot. zhur. 21 no.4:85-94 '64.

(MIRA 17:11)

1. Otdel vysshikh rasteniy Instituta botaniki AN UkrSSR.

REVA, M. I.; DUBOVIK, O.M. [Dubovyk, O.M.]

New habitat of *Petrosurus spectabilis* M.B. in the Ukraine. Ukr.bot.
zhur. 17 no.1:85-86 '60. (MIRA 13:6)

1. Institut botaniki AN USSR, otdel veshchikh rasteniy i Derkul'skaya
zemnaya isspytatel'naya stantsiya Ukrainskogo nauchno-issledovatel'sko-
go instituta lesnogo khozyaystva i agrolesomelioratsii.
(Ukraine---Desert candle)

DUBOVIK, O.N. [Dubovyk, O.M.]

Interesting and rare plants collected in the Streletskoye Steppe
Preserve (Lugansk Province) and adjacent areas. Ukr. bot. zhur.
17 no.6:85-89 '60. (MIRA 14:3)

1. Institut botaniki AN USSR, otdel vysshikh rasteniy.
(Streletskoye Steppe Preserve—Botany)

DUBOVIK, O. N. [Dubovyk, O.M.]

Outline of the Donets forest-steppes flora. Report No. 1:
General characteristics of the flora and disjunctions of the
ranges of plants. Ukr. bot. zhur. 20 no.6:63-73 '63.

(MIRA 17:2)

l. Institut botaniki AN UkrSSR, otdel sistematiki vyschikh
rasteniy.

DUBOVIK, O.N. [Dubovyk, O.M.]

New plant species from the Donets forest steppes. Ukr. bot.
zhur. 21 no. 2:83-94 '64. (MIRA 1715)

1. Institut botaniki AN UkrSSR, otdel vysshikh rasteniy.

SHAVEL'SKIY, A.Ye. [Shavel'ski, A.]; DUBOVIK, P., red.; SLAVYANIN, I.,
tekhn.red.

[Increasing labor productivity is the most important condition
for the carrying out of the seven-year plan] Pervyyenye
produktyinosti pratsyvashcheishaiia umova vykazannia siamihodki.
Minsk, Druzhshchinae vyd-va BSSR. Red.-izava-palit.lit-ry. 1959.
(KIBA 13:4)

39 p.

(White Russia--Efficiency, Industrial)

"APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R000411410003-7

MALININ, S.N. [Malinin, S.N.]; POPOV, A.N. [Popov, A.N.]; DUBOVIK, P.
red.; SLAVYANIN, I., tekhn.red.

[National economy of the White Russian S.S.R. during the seven-
year plan] Narodnaia hospodarka Belaruskai SSR u siamibodtey.
Minsk, Dniarzh.vyd-va BSSR. Rad.minsava-palit.lit-ry, 1959. 80 p.
(MIRA 13:4)
(White Russia—Economic policy)

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