

LUR'YE, L.M.

Metasomatic zoning of aureoles in the Zambarak deposit. Geol.-  
rud.mestorozh. 5 no.1:17-33 Ja-F '63. (MIRA 16:3)

1. Institut geologii rudnykh mestorozhdeniy, petrografii,  
mineralogii i geokhimii AN SSSR, Moskva.  
(Kara-Mazar Mountains--Metasomatism)

LUR'YE, L.M.

Drying of a pyrite concentrate in an enlarged laboratory tube  
drier. Sbor. nauch. trud. Gintsvetmeta no.19:484-492 '62.

(MIRA 16:7)

(Pyrites) (Ore dressing)

LUR'YE, L.M.

Some phenomena of ore metamorphism in the Zambarak deposit  
(eastern Karamazar Mountains, Central Asia). Geol. rud.  
mestorozh. 5 no.6:93-95 N-D'63. (MIRA 17:5)

1. Institut geologii rudnykh mestorozhdeniy, petrografii,  
mineralogii i geokhimi AN SSSR, Moskva.

LUR'YE, L. M.

"Data on the Characteristics of the Morphology and Immunology of an Experimental Dysentery Infection (Shiga)." Sub 3 May 51, Acad Med Sci USSR.

Dissertations presented for science and engineering degrees in Moscow during 1951.

SO: Sum. No. 480, 9 May 55.

USSR/Biology - Microbiology, Vitamins Mar/Apr 52

"Significance of Thiamin for the Formation of Acetone by the Smooth and Vane-Shaped Varieties of Bac. acetohylicus," N. D. Yerusalimskiy, L. M. Lurye, Biol Soil Sci Res Inst, Moscow State U Imeni M. V. Lomonosov

"Mikrobiol" Vol XXI, No 2, pp 155-159

The smooth variety of Bac. acetohylicus (I) forms more acetone than the vane-shaped variety (II). I does not require thiamin for the formation of acetone, while II does. Thiamin plays a specific role in the formation of acetone, but not that of

210711

USSR/Biology - Microbiology, Vitamins Mar/Apr 52  
(Contd)

alc: Both I and II form alc equally well independ-  
ently of the dosage of thiamin. One must assume  
that I has a better developed capacity for the in-  
dependent synthesis of thiamin than II.

210711

LURYE, L. M.

LUR'YE, L. M.

LUR'YE, L. M.- "Experimental Observation Over Immunological Shifts and Immunological Effectiveness of Vaccination Against Bacterial Dysentery." Azerbaijan State Medical Inst, Baku, 1955 (Dissertations for Degree of Candidate of Medical Science)

SO: Knizhnaya Letopis' No. 24, June 1955, Moscow

LUR'YE, L.M.

✓ Production of radioactive (sulfur-35) penicillin. M. M. Levitov, V. A. Gotovtseva, I. I. Inozemtseva, M. M. Bychkova, L. M. Lur'ye, N. A. Kushchev, and A. M. Nenashina. *Antibiotiki* 1, No. 4, 20-4 (1958). -- A synthetic medium was developed which had a min. S content, sufficient to allow the utilization of more than 60% of the S (as  $SO_4^{2-}$  ion) in the nutrient for the biosynthesis of penicillin. The process made it possible to prepare penicillin, contg. labeled S ( $S^{35}$ ), with a radioactivity of 8-8 m. c./g. (cf. C.A. 48, - 195365).  
D. M. Chern

*A. U. Sci Res. Inst. Antibiotics*

LEVITOV, M.M.; GERMANOVA, K.I.; TOVAROVA, I.I.; BYCHKOVA, M.M.; LUR'YE, L.M.;  
MIKHAYENKOV, P.S.

Physiological characteristics of various strains of *Penicillium chrysogenum*; effect of the composition of the medium and of fermentation conditions on penicillin synthesis by strains New Type 24, Hybrid-31 and B-51-20. Antibiotiki 3 no.2:3-7 Mr-Apr '58.

(MIRA 12:11)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut antibiotikov.  
(PENICILLIUM, culture,  
chrysogenum, eff. of medium composition & fermentation  
on penicillin synthesis by various strains (Rus))



LUR'YE, L.M., kand.meditsinskikh nauk

Protein metabolism in tuberculosis under experimental conditions.  
Azerb. med. zhur. no. 8:19-25 Ag '60. (MIRA 13:8)

1. Iz Respublikanskogo nauchno-issledovatel'skogo instituta  
tuberkuleza (direktor - kand.meditsinskikh nauk A.D. Nurmamedov,  
nauchnyy rukovoditel' - prof. A.Ye. Ter-Gazarov).  
(PROTEIN METABOLISM) (TUBERCULOSIS)

LEVITOV, M.M.; LUR'YE, L.M.; ZAVILEYSKAYA, G.F.

Role of precursors in the biosynthesis of penicillin. Antibiotiki 6  
no.12:1058-1063 D '61. (MIRA 15:2)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut antibiotikov.  
(PENICILLIN)

LUR'YE, L.M.; ALIKHANYAN, S.I.

Formation of penicillin through uninterrupted feeding of carbohydrates into fermentation media. Antibiotiki 7 no.1:11-16 Ja '62.

(MIRA 15:2)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut antibiotikov.  
(PENICILLIN) (CARBOHYDRATES)

LUR'YE, L.M.; LEVITOV, M.M.

Penicillin biosynthesis by highly productive strains of *Penicillium chrysogenum* on media with different carbohydrates. Antibiotiki 8 no.8: 677-683 Ag '63. (MIRA 17:5)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut antibiotikov.

LUR'YE, L.M.; LEVITOV, M.M.

Formation of different types of penicillin by active strains  
of *Penicillium chrysogenum*. Mikrobiologiya 32 no.2:308-315  
Mr-Apr '63. (MIRA 17:9)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut antibiotikov.

LUR'YE, L.S. , kand.tekhn.nauk; TER-SIMONYAN, L.G.

Possibilities of using gamma rays for disinfecting soils and  
controlling clubroot in Brassicaceae. Dokl.Akad.sel'khoz. 24  
no.6:28-29 '59. (MIRA 12:9)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut elektrifika -  
tsii sel'skogo khozyaystva i nauchno-issledovatel'skiy institut  
ovoshchnogo khozyaystva. Predstavlena akademikom M.G.Yevreinovym.  
(Brassicaceae--Diseases and pests) (Gamma rays)  
(Soil disinfection)

LUR'YE L. S.

181T30

USSR/Electricity - Transmission Systems Jan 51  
Power, Apparent

"Apparent Power of Three-Phase Systems," L. S.  
Lur'ye, Cand Tech Sci, Moscow

"Elektrichestvo" No 1, pp 47-53

Examd apparent power of 3-phase syst, defined  
as max active power which may be transmitted  
for given voltages and line losses. Establshed  
relationship between apparent power of 3-phase  
syst and active and reactive powers. Introduces

181T30

USSR/Electricity - Transmission Systems Jan 51  
(Contd)

a new criterion of asymmetry -- power of asymme-  
try, which determines directly losses in the  
syst caused by asymmetry at receiving end. Sub-  
mitted 18 Apr 50.

181T30

LUR'YE, L. S.

PA 240132

USSR/Electricity - Distribution Systems Mar 52

"Power Factor for an Unbalanced Load on a Three-Phase Network," Cand Tech Sci L. S. Lur'ye, All-Union Inst for Electrification of Agriculture

"Elektrichestvo" No 3, pp 52-58

Examines existing methods for detg power factor. Power factor of an arbitrary load on 3-phase network is defined as ratio of effective to apparent power of 3-phase system. Demonstrates expediency of representing power factor as product of unbalance and phase difference coeffs. Submitted 27 Sep 51.

240132



YUR<sup>Y</sup>E, L. S.

Electric Engineering

Problems in the analysis and calculation of irregular charging of three-phase network with the utilization of power from non-symmetry, Energ. biul. No. 2, 1953.

9. Monthly List of Russian Accessions, Library of Congress, May 1953. Unclassified.

METEIKIN, A.F.; KARPOVA, K.A., inzhener; LUR'YE, L.S., kandidat tekhnicheskikh nauk; RAKHIMOV, G.R., dotsent, kandidat tekhnicheskikh nauk; KYAZIM-ZADE, Z.I., dotsent, kandidat tekhnicheskikh nauk.

Remarks on the textbook on theoretical electric engineering for higher schools. Elektrichestvo no.12:70-72 D '53. (MIRA 6:11)

1. Ivanovskiy energeticheskiy institut im. Lenina (for Metelkin and Karpova).
2. Vsesoyuznyy nauchno-issledovatel'skiy institut elektrifikatsii sel'skogo khesyaystva (for Lur'ye).
3. Sredneaziatskiy politekhnicheskiy institut (for Rakhimov).
4. Azerbaydzhanskiy industrial'nyy institut im. Azisbekova (for Kyzim-Zade). (Electric engineering--Textbooks)

LUR'YE, L. S.

AID P - 788

Subject : USSR/Electricity  
Card 1/1 Pub. 28 - 3/5  
Author : Lur'ye, L. S.  
Title : Determination of power factor of a non-symmetric receiver  
constituting part of the load of a three-phase circuit  
Periodical : Energ. byul. #2, 15-25, F 1954  
Abstract : Graphical and analytical determination of power factor  
is given for a non-symmetric load circuit connected to  
a balanced three-phase line. 6 vector diagrams, 2 mat-  
herical examples and 2 Russian references (1948-1951).  
Institution : None  
Submitted : No date

LAVROV, V.M. L.S.

LAVROV, V.M., kandidat tekhnicheskikh nauk; PEREKALIN, M.A., professor;  
LUR'YE, L.S., kandidat tekhnicheskikh nauk.

Remarks on B.A. Teleshev's article "Necessity of making terminology concerning the measurement of reactive power more precise."  
(MLRA 7:5)  
Elektrichestvo no. 4:77-80 Ap '54.

1. Moskovskiy elektrotekhnicheskiy institut svyazi (for Lavrov).
2. Moskovskiy energeticheskiy institut im. Molotova (for Perekalin).
3. Vsesoyuznyy nauchno-issledovatel'skiy institut elektrifikatsii sel'skogo khozyaystva (for Lur'ye). 4. Moskovskiy inzhenerno-ekonomicheskoy institut im. Ordzhonikidze (for [professor] Teleshev)  
(Electric engineering--Terminology) (Teleshev, B.A.)

LUR'YE, L.S.

VORONOV, R.A., professor, doktor tekhnicheskikh nauk; PUKHOV, G.Ye., dotsent,  
doktor tekhnicheskikh nauk; LUR'YE, L.S., kandidat tekhnicheskikh nauk.

Apparent capacity of an electric circuit. Elektrichestvo no.4:81 Ap '54.  
(MLRA 7:5)

(Electric circuits)

BAL'YAN, R.Kh., inzhener; LUR'YE, L.S., kandidat tekhnicheskikh nauk.

Terminology of theoretical electric engineering. Elektrichestvo no.5:  
84-85 My '54. (MLRA 7:6)

1. Zavod im. Kalinina MRP (for Bal'yan). 2. Vsesoyuznyy nauchno-issledovatel'skiy institut elektrifikatsii sel'skogo khozyaystva (for Lur'ye).  
(Electric engineering--Terminology)

GLEBOVICH, A.A., kand.tekhn.nauk; LUR'YE, L.S., kand.tekhn.nauk

Regulating the excitation of generators of rural hydroelectric  
power stations. Mekh. i elek. sots. sel'khoz. 16 no.3:39-42 '58.  
(MIRA 11:6)

(Electric generators)

LUR'YE, L.S.; KHRUSHCHEV, V.G.; YELISEYEV, V.S.; KUZNETSOV, S.V.

Irradiation plants at the All-Union Scientific Research  
Institute for the Electrification of Agriculture. Atom.  
energ. 19 no.2:212-216 Ag '65. (MIRA 18:9)



ARKHIPOV, V.V.; LUR'YE, L.S.; PROKOF'YEV, N.S.; KHRUSHCHEV, V.G.

Prospects for the use of radiation sterilization in veterinary  
medicine. Veterinariia 42 no.12:82-84 D '65. (MIRA 19:1)

I. 22401-66 EWT(1)/EWA(h)

ACC NR: AP6009888

SOURCE CODE: UR/0413/66/000/004/0080/0081

INVENTOR: Gerasimov, A. Ya.; Khrushchev, V. V.; Lur'ye, L. Z.; Shtamm, Yu. P.;  
Ivanov, V. V.; Nokain, E. A. 30  
B

ORG: none

TITLE: Device for the <sup>25</sup>display of voltage curves on the screen of a cathode-ray oscilloscope. Class 42, No. 179019 [announced by the Special Design Office, AN Estonian SSR (Spetsial'noye Konstruktorskoye byuro AN Estonskoy SSR)]

SOURCE: Izobreteniya, promyshlennyye boraztsy, tovarnyye znaki, no. 4, 1966, 80-81

TOPIC TAGS: oscilloscope, data display, visual signal, display device

ABSTRACT: The Author Certificate introduces a device for displaying voltage curves on an oscilloscope screen. For enhanced speed and accuracy, the electronic switches are fitted with elements which correct the characteristics of the pickups and the tubes. A contactless ring distributor of rectangular pulses is included; it is synchronized by the voltage of the generator which feeds the pickups. In order to move the cali-

Card 1/2

UDC: 681.14

I. 22401-66

ACC NR: AP6009888

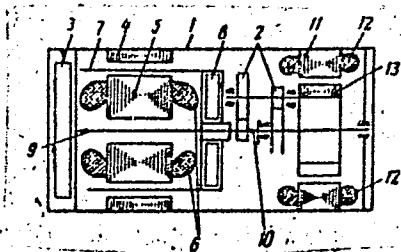


Fig. 1. Display device

1 - Electronic switches; 2 - pickups;  
3 - oscilloscope; 4 - calibration  
pickup; 5 - delay unit.

bration pickup is connected to the electronic switch through a controlled delay unit.  
(see Fig. 1). Orig. art. has: 1 figure. [DW]

SUB CODE: 09/ SUBM DATE: 12Aug64/

Card 2/2 *HW*

LUR'YE, Leonid Zinov'yevich; SERGEYEV, I.V., red.; SEDOVA, Z.D., red.  
~~izd-va; SHIBKOVA, R.Ye., tekhn. red.~~

[New methods for butting lumber]Novye metody tortsovki pilomaterialov. Moskva, Goslesbumizdat, 1962. 32 p. (MIRA 16:3)  
(Woodworking machinery)

LUR'YE, M., inzh.; AMIRDZHANOV, S., inzh.

Industrial method used in pipe laying for cold storage installations.  
Khol.tekh. 37 no.4:42-44 JI-Ag '60. (MIRA 13P11)

1. Orgproyekttekhmontazh Ministerstva stroitel'stva RSFSR (for Lur'ye). 2. Vsesoyuznyy nauchnoissledovatel'skiy institut zheleznodorozhnogo transporta (for Amirdzhanov):  
(Cold storage warehouses)

LUR'YE, M.A.

Construction Industry- Finance

Improve the system of financing construction. Gor. khoz. Mosk., 26, no. 7, '52.

Monthly List of Russian Accessions, Library of Congress, October 1952. UNCLASSIFIED.

LUR'YE, M.A.; VEYKHER, A.A.; MAKEYEV, V.I., red. izd-va; IYERUSALIMSKAYA,  
Izdatel'stvo tekhn. red.

[Quality required by industry in mineral raw materials; a handbook  
for geologists] Trebovaniia promyshlennosti k kachestvu mineral'nogo  
syr'ia; spravochnik dlia geologov. Moskva, Gos. nauchno-tekhn. izd-  
vo lit-ry po geol. i okhrane neдр. No.7. [Quartzite, sandstone and  
vein quartz] Kvartsit, peschanik i zhil'nyi kvarts. Nauchn. red.  
A.A.Veikher. 1961. 38 p. (MIRA 14:8)

1. Moscow. Vsesoyuznyy nauchno-issledovatel'skiy institut mineral'nogo  
syr'ya.

(Mineralogy)

LUR'YE, M.A.; LINDEMAN, G.V.

Trunk pests of the Dahurian larch in Transbaikalia. *Izv.Sib.¶td.*  
AN SSSR no.2:116-120 '61. (MIRA 14:3)

1. 5-ya Moskovskaya aerofotolesoustroitel'naya ekspedithiya.  
(Transbaikalia--Larch--Diseases and pests)



LUR'YE, M.A.

Bark beetles (Ipidae) of Kemerovo and Novosibirsk Provinces. Izv.  
Sib. otd. AN SSSR no. 4: 119-124 '59. (MIRA 12:10)

1. 5-ya Moskovskaya aerofotolesoustroitel'naya ekspeditsiya.  
(Kemerovo Province--Bark beetles)  
(Novosibirsk Province--Bark beetles)

LUR'YE, M.A.

Bark and timber beetles infesting elms in Stalingrad Province.  
Ent. oboz. 37 no. 2: 294-307 '58. (MIRA 11:7)

1. Kafedra entomologii Moskovskogo gosudarstvennogo universiteta,  
Moskva.

(Stalingrad Province--Borers(Insects))  
(Elms--Diseases and pests)

TISHCHENKO, I.T.; SMOGARZHEVSKAYA, Ya.M.; SOFIYENKO, N.Ya.; KONSTANTINOVA,  
A.A.; LUR'YE, M.A.

On the problem of the etiology and epidemiology of intestinal  
dysfunctions induced by pathogenic Escherichia coli. Zhur.  
mikrobiol., epid. i immun. 30 no.12:115-117 D '59.

(MIRA 13:5)

1. Iz Kiyevskoy gorodskoy sanitarno-epidemiologicheskoy stantsii.  
(ESCHERICHIA COLI INFECTIONS in inf. & child)

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

LIST AND ORDER

PROCESSES AND PREPARED IN THE

DA

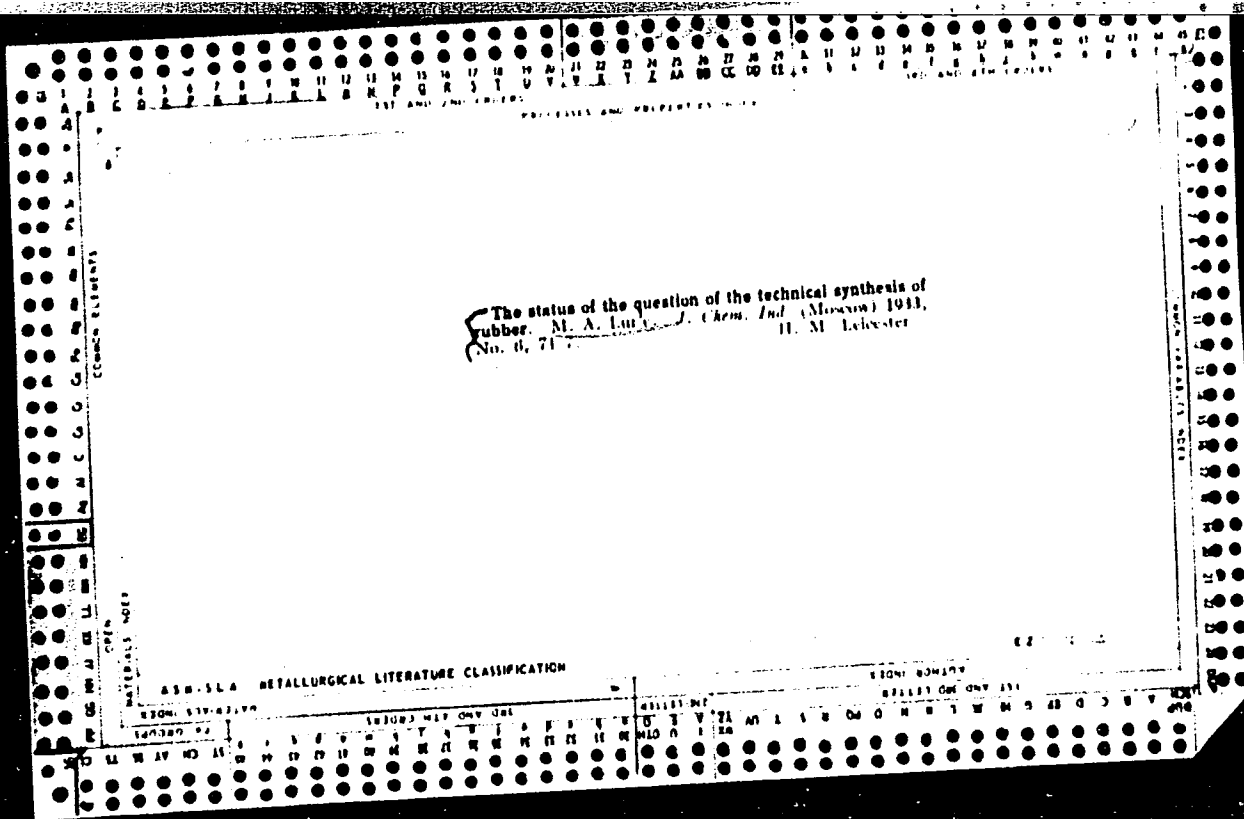
30

detection of a catalyst for polymerization of divinyl (butadiene) formed by pyrolysis of petroleum fractions. M. A. Lur'e and V. A. Ignatyuk. *Sintet. Kauchuk* 1932, No. 3, 12-14.—A description of methods for polymerization of butadiene employed by the U. S. S. R. synthetic rubber industry. For polymerization of butadiene from the petroleum fractions diazoaminobenzene is used as a catalyst. Polymerization is carried out at 100° and under 18-20 atm. pressure with stirring. For polymerization of butadiene formed by pyrolysis of EtOH metallic Na is employed as a catalyst and the process is carried out at 50-60° and 4 atm. pressure. James Sorrel

COVER SHEET

ASD 3L6 METALLURGICAL 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



PROCESSES AND PROPERTIES INDEX

*Co*

Cuprous chloride and dienes. M. A. Lur'e, M. N. Marushkin, V. O. Chistov and M. A. Shiroberg. *Sintet. Kauchuk* 3, No. 6, 13-18 (1974); *Chem. Zentr.* 1975, 1, 1970-7. - The data in the literature on the use of  $Cu_2Cl_2$  for the concg. and purifying of diene compds., especially *bisvinyl*, were checked. Orientation expts. were made with a gas mixt. contg. 70% *bisvinyl* in addn. to pseudobutylene, etc. For the expts. made in an Orsat app. a satd. soln. of  $Cu_2Cl_2$  in satd. aq.  $CaCl_2$  (100 water, 40  $CaCl_2$ , 6  $Cu_2Cl_2$ ) served as absorbent. At room temp. the soln. absorbed 72 vola. % of the gas mixt.; with repeated use the absorptive capacity gradually decreased. During the course of the absorption there is formed a light yellow cryst. ppt. of the compn.  $Cu_2Cl_2 \cdot C_4H_6$ . The absorption capacity of the  $Cu_2Cl_2$  soln. in general decreases with decrease of the *bisvinyl* concn. in the gas mixt. and also with decrease of the  $Cu_2Cl_2$  concn. of the soln.  $NaCl$  or  $NH_4Cl$  can be used in place of the  $CaCl_2$  in the prepn. of the  $Cu_2Cl_2$  soln. The ratio  $Cu_2Cl_2:NH_4Cl$  is essentially important. The greater the amt. of  $Cu_2Cl_2$  in relation to the  $NH_4Cl$  the greater the amt. of complex Cu compds. formed and pptd. Heating to 85° assures complete sepn. of the *bisvinyl* from the soln. The action of various salts and bases, as  $NaCl$ ,  $NH_4Cl$ ,  $CaCl_2$ ,  $KBr$ ,  $FeCl_3$ ,  $Cu_2Cl_2$  and pyridine, produces decompn. of the complex Cu compd. The *bisvinyl* can be distd. off either from the solid double compd. or from the mixt. of the compd. with the liquid contg. a portion of the *bisvinyl* in soln. One g.  $Cu_2Cl_2$  in satd. soln. (100 g. water, 37 g.  $NH_4Cl$ , 30 g.  $Cu_2Cl_2$ ) absorbed 82 cc. or 193 mg. of *bisvinyl* at room temp. and normal pressure and 90.4 cc. at 8°. The addn. of excess  $Cu_2Cl_2$  to the soln. of the salt in  $NH_4Cl$  soln. increased the amt. of absorbed *bisvinyl*. In pure aq. suspension the *bisvinyl* is slowly absorbed; however, practically 1 mol. of *bisvinyl* is absorbed by 1 mol. of  $Cu_2Cl_2$  in such a case. The  $NH_4Cl$  therefore only accelerated the reaction. Moreover, air-dried  $Cu_2Cl_2$  powder absorbs *bisvinyl* with rise in temp. and encrustation of the mass. One l. of water at 0° absorbs 153 cc., 1 l. of alc. absorbs 3.27 l., 1 l. of 1 N  $C_4H_9OH$  absorbs 4.9 l. of *bisvinyl*. It is recommended that the liquid solvents for  $Cu_2Cl_2$  be replaced by solid carriers, as pumice stone. Orientation investigations are reported on the absorption of *piperylene* and *cyclopentadiene* by the  $Cu_2Cl_2/NH_4Cl$  soln., in which ppts. of the complex Cu compd. are likewise formed. One g. of solid  $Cu_2Cl_2$  absorbs 10 cc.  $C_4H_6$ , 74 cc.  $C_5H_6$ , and 128 cc. vinylacetylene. M. G. Moore

3

COMMON ELEMENTS

COMMON VARIABLES INDEX

ASB-51A METALLURGICAL LITERATURE CLASSIFICATION

1970-1974

LUR'YG, M-A.

20

The separation of 1,3-butadiene from a mixture with other hydrocarbons through the formation of the cuprous chloride butadiene. M. A. Lur'e, M. N. Marushkin, M. M. Afanas'yev and A. T. Pilenov. *Soviet. Khim.* 3, No. 6, 19 (201931); *Chem. Zentr.* 1935, II, 1977 8; cf. preceding abstr. Concn. of the butadiene (I) from the gases of petroleum pyrolysis presents considerable difficulty. I forms a complex compl. with  $Cu_2Cl_2$  which has the compn.  $Cu_2Cl_2 \cdot C_4H_6 \cdot 4H_2O$  or  $Cu_2Cl_2 \cdot C_4H_6$  according to the conditions of the reaction. The reaction is  $2NH_4CuCl_2 + C_4H_6 \rightarrow Cu_2Cl_2 \cdot C_4H_6 + 2NH_4Cl$ . The reaction is reversible; the double compl. is decompd. by the action of  $NH_4Cl$ . For this reason the velocity of formation of the double compl. decreases as the free  $NH_4Cl$  accumulates. The reaction, however, proceeds very well if excess solid  $Cu_2Cl_2$  is added to the soln. of  $NH_4CuCl_2$ , so that through the soln. of the  $Cu_2Cl_2$  the concn. of  $NH_4CuCl_2$  is maintained at a const. level. The double compl. is a pale yellow powder smelling faintly of I. It burns with a slightly smoky flame and is not exploded by heating, detonation, etc. The compl. can be kept indefinitely in a closed vessel. It is decompd. by moist air. When treated with concd.  $NH_4Cl$  or alkali chloride solns., I is evolved. It can be kept under O-free water. It readily dissociates on heating. From a study of the disocn. of the double compl. in relation to the temp. a value of +15,704 cal./mol. was obtained for the reaction for the formation of the double Cu compl. at temps. from 0° to 64.7°. The temp. of decompn. at 760 mm. Hg is 62.5°. The compl. is formed also from I and dry  $Cu_2Cl_2$ .  $I + Cu_2Cl_2 \rightarrow Cu_2Cl_2 \cdot C_4H_6 + 15,704$  cal. The course of the reaction with solid  $Cu_2Cl_2$  was examd.

with the help of the Gibbs phase rule. It was shown that beginning, e. g., with a gas contg. 30%  $C_4H_6$ , the absorption of the  $C_4H_6$  at 27° amounted to 94.4%; this was completely given up again on decompn. Temps. above 27° are not suitable for the absorption process. The presence of vinylacetylene (II) in the gases of petroleum pyrolysis makes the isolation of I difficult because this compl. likewise combines with  $Cu_2Cl_2$ . In  $NH_3$  solns. of low  $Cu_2Cl_2$  content II forms a difficultly sol. yellow ppt. which decomposes upon heating; in concd. solns. of  $Cu_2Cl_2$  II does not form a ppt. but becomes concd. in the mother liquor while butadiene- $Cu_2Cl_2$  seps. out. In this way it is possible to sep. the 2 hydrocarbons. When liquid hydrocarbon mixts. are allowed to act upon solid  $Cu_2Cl_2$ , II is very well absorbed by the  $Cu_2Cl_2$ . If a mixt. of gaseous hydrocarbons, on the other hand, is allowed to act on the solid  $Cu_2Cl_2$ , II is fixed only to a very slight degree. The purest I, therefore, is that which has been allowed to react with the solid  $Cu_2Cl_2$  in the vapor form. M. G. M.

*1 of 2.*

*Polymer from ...  
...*

**Polybutene having rubber-like properties.** M. A. LUR'g (Kauchuk i Rezina, 1940, No. 9, 10-8; I.R.W., 1940, 118, 73). Polybutenes range in consistency from oil-like liquids to solid plastic polymers. Their properties are reviewed. The plastic rubber-like polymers are a valuable raw material for the rubber industry. The Soviet oil and natural gas industry produces large volumes of butene. The polymerisation of butene and its use in the synthetic rubber industry are discussed.

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*1/10/41*



117 AND 120 CODES

PROCESSES AND PROPERTIES INDEX

22

CA

Petroleum as a source of raw materials for the production of rubberlike substances. M. A. Lur'e. *Doklady Akad. Nauk SSSR*, 9, 609-28(1940).—L. discusses the optimum conditions of cracking and thermal decompn. for the production of max. amts. of divinyl, isoprene, propylene, ethylene, cyclopentadiene, etc., the energies of activation for the various reactions and the thermal stabilities of the products. Chem. conversions as by chlorination-dechlorination or by ethanol or  $C_2H_5$  are considered as well as the production of materials for chloroprene rubber.

COMMON ELEMENTS

COMMON VARIABLES INDEX

ASR-51A METALLURGICAL LITERATURE CLASSIFICATION

FROM ROMANOV

FROM ROMANOV	FROM ROMANOV
FROM ROMANOV	FROM ROMANOV

117 AND 7ND ORDER      18D AND 4TH ORDER

PROCESSES AND PROPERTIES INDEX

CS      6

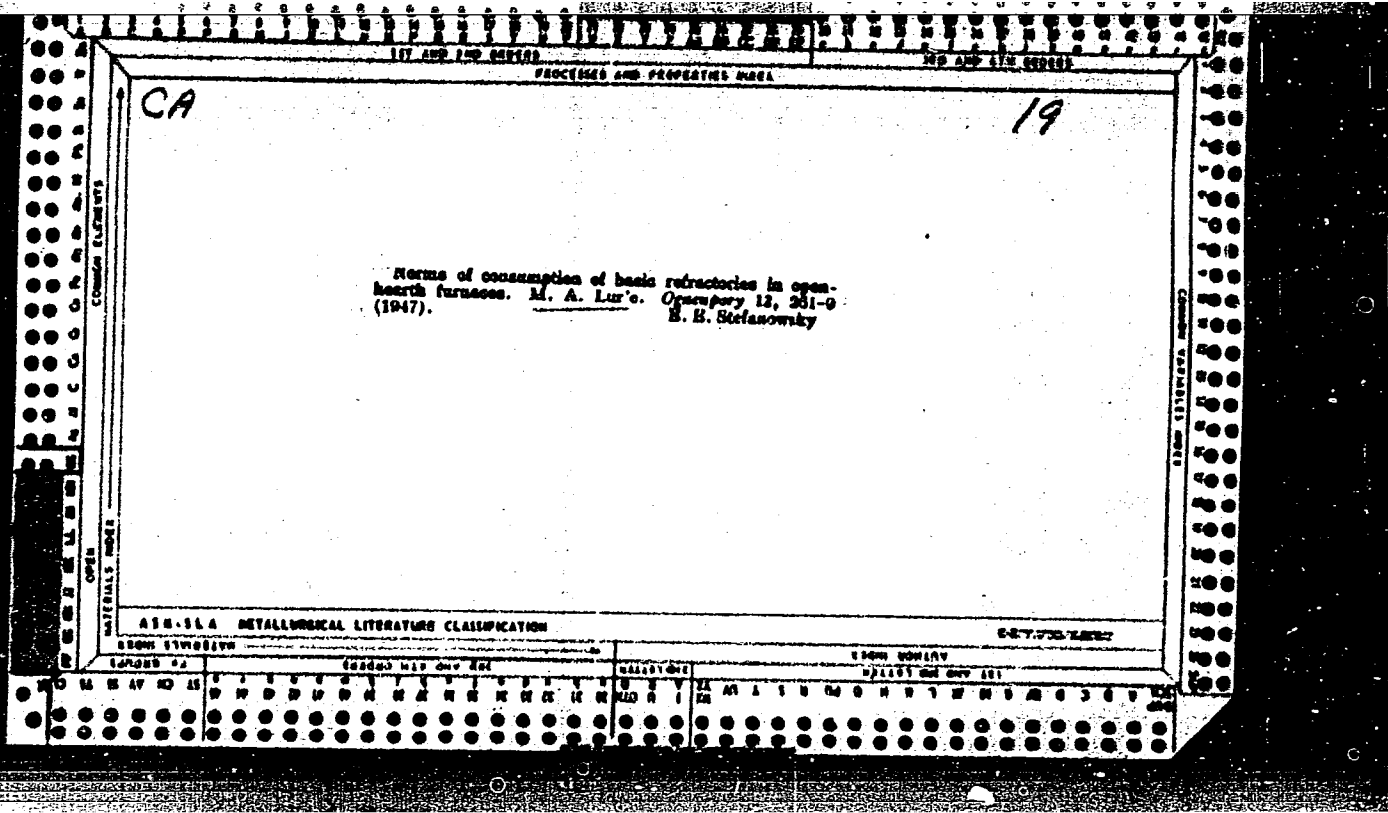
551. RATIONALISING RAILWAY TRANSPORT OF REFRACTORIES. -- M. A. Lurye (*Ognesov*, 9, 44, 1941). The Kharkov Institute of Refractories has carried out a survey of production and consumption of refractories in the U.S.S.R., with a view to reducing railway transport by re-distributing the manufacture of special refractories and by other means.

ASB-55.4 METALLURGICAL LITERATURE CLASSIFICATION

10000 00      20000 000 001      30000 000 001      40000 000 001

10000 00      20000 000 001      30000 000 001      40000 000 001

10000 00      20000 000 001      30000 000 001      40000 000 001



LUR'YE, Mikhail Aleksandrovich; TSENDLER, A.A., professor, doktor, retsenzent;  
GLEBOV, S.V., professor, retsenzent; PEVNER, R.L., redaktor; EL'KIND,  
L.M., redaktor izdatel'stva; BERLOV, A.P., tekhnicheskiy redaktor

[Refractory materials in nonferrous metallurgy] Ogneupory v tsvetnoi  
metallurgii. Moskva, Gos. nauchno-tekhn. izd-vo lit-ry po chernoi i  
tsvetnoi metallurgii. 1956. 149 p. (MIRA 9:12)  
(Refractory materials)

SOV/81-59-9-32088

Translation from: Referativnyy zhurnal. Khimiya, 1959, Nr 9, p 358 (USSR)

AUTHORS: Kukolev, G.V., Kivin, D.I., Zelenskaya, A.T., Lur'ye, M.A., Minskiy, Ya.M.

TITLE: Magnesite-Dolomite Highly-Refractory Products

PERIODICAL: Sb. nauchn. tr. Vses. n.-1. in-ta ogneuporov, 1958, Nr 2 (49), pp 277 - 296

ABSTRACT: The manufacture of magnesite-dolomite products from clinkers with various content of dolomite (D) and magnesite (M) in the raw material mixture of the clinker has been studied. Satka M and Karagay D served as raw material; for binding CaO, crystalline quartzite and iron scale were introduced; for the stabilization of  $\beta$ -2CaO · SiO<sub>2</sub> an addition of phosphorite ore was introduced. The composition of the magnesite-dolomite charge was so calculated that a high ( $\sim 1$ ) coefficient of saturation with lime was obtained. Four charges were prepared: I - the ratio of M to D = 1:1; I<sup>F</sup> - the same with an increased content of scale, II and III with the ratio M to D = 1:2 and 2:1, respectively. Dried briquets from charges I, I<sup>F</sup> and II were burnt in the rotating furnace

Card 1/2

## Magnesite-Dolomite Highly-Refractory Products

SOV/81-59-9-32088

at 1,710 - 1,760°C and from charge III in the periodic furnace at 1,600°C; the burnt briquets were ground and from the powders (the grain composition is cited) products were formed and burnt: from charges I, I<sup>F</sup> and II at 1,430°C, from charge III at 1,460°C. A part of the raw bricks were left for hydraulic hardening for obtaining bricks without burning. The bricks from all the charges, in spite of the low burning temperature, have a high density (porosity 8.12 - 14.1%), high mechanical resistance ( $\sigma_{\text{comp}} 1,050-1,310 \text{ kg/cm}^2$ ) and a high temperature of deformation under load (the beginning of softening in I, I<sup>F</sup> and II takes place at 1,670, 1,540, 1,630°C, respectively, in III at 1,700°C softening did not begin). The content of highly-refractory phases was 86 - 88%. After a storing of 75 days, bricks without burning have also a high deformation temperature (in III there was no deformation at 1,700°C). The test of magnesite-dolomite bricks carried out in the laying of columns of the front wall of 30-t open-hearth furnaces has shown that these bricks are a completely suitable refractory material for them.

V. Zlochevskiy

Card 2/2

SOV/81-59-16-57775

Translation from: Referativnyy zhurnal. Khimiya, 1959, Nr 16, p 300 (USSR)

AUTHOR: Lur'ye, M.A.

TITLE: Economic Data on the Production of Magnesium Oxide From the Brine of  
Crimean Lakes

PERIODICAL: V sb.: Kompleksn. ispol'zovaniye solyan. resursov Sivasha i Perekopsk.  
ozher. Kiyev, AN UkrSSR, 1958, pp 161-167

ABSTRACT: The expediency of organizing the industrial production of magnesium oxide  
from brine for the manufacture of refractories is considered.

G. Gerashchenko.

Card 1/1

131-58-6-8/14

AUTHORS: K. Kulev, G. V., Kivin, D. I., Zelenskaya, A. T., Lur'ye, M. A.,  
Kinn'iy, Ya. M.

TITLE: Water-Tight Magnesite-Dolomite Brick (Vodoustoychivyy magnezito-  
dolomitovy kirpich)

PERIODICAL: Ogneupory, 1958, Nr 6: pp. 270 - 274 (USSR)

ABSTRACT: The investigations carried out by the Institute for Refractory Products showed that by combining magnesite and dolomite in the raw mixture for clinkers it is possible to obtain products of high quality, which was proved in the papers by G. V. Kukolev and D. I. Kivin (Reference 1). In carrying out the present work clinkers were produced by means of burning a calculated and controlled finely ground mixture of dolomite, magnesite, quartzite and phosphorite. The finely ground mixtures were produced according to the wet process. In table 1 some results of the laboratory investigations are mentioned. In the VNIIO experimental works several tons of synthetic water-tight magnesite-dolomite clinkers were produced and of it burned and unburned bricks were made. Furthermore the production of the masses is described in

Card 1/3



Water-Tight Magnesite-Dolomite Brick

131-58-G-3/14

detail. The investigation of the samples after burning (tables 2 and 3) showed that the bricks of all masses showed a high density and mechanical strength notwithstanding the relatively low burning temperature. In testing the magnesite-dolomite as well as the usual magnesite bricks in practice the former proved to be of better quality. Thanks to the hydraulic hardening the unburned bricks showed after one day of storing a resistance to pressure of 63-83 kg/cm<sup>2</sup>, after one month 294-340 kg/cm<sup>2</sup>, and after 3 months 530-670 kg/cm<sup>2</sup>, having good properties with all this. Furthermore a scheme for the production of magnesite-dolomite bricks is recommended and described in detail. The possibility and usefulness of vacuum filtering of the slip is proved by the work of G. Z. Dolgina (Reference 2). Unburned big magnesite-dolomite blocks can be produced of burned clinker powders in the villages where they are needed. For the metallurgy in the South, Siberia and other districts the production of bricks can be based on the mixture of dolomite and caustic magnesite with additions. These methods are also to be made use for saving magnesite and chromite ores. The production of unburned fire-proof magnesite-dolomite products is to be organized in the works

Card 2/3

Water-Tight Magnesite-Dolomite Brick

131-58-6-8/14

departments for refractory products in the Ural mountains, on the condition that the ready magnesite-dolomite powder of the "Magnesit" will be supplied. Their production of the same burned and unburned products is to be organized in the Nikitovka dolomite Kombinat of dolomite and caustic magnesite with additions. The staff of editors of the periodical remarks on this in reference 3 that first of all a testing of these products of a great industrially produced amount of such bricks would be necessary. There are 3 tables and 2 references, 2 of which are Soviet.

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy institut ogneporov  
(All-Union Scientific Research Institute for Refractories)

1. Refractory materials--Production
2. Refractory materials--Analysis
3. Refractory materials--Test results

Card 3/3

LUR'YE, M.A.

Enlarged session of the Scientific Council in the Ukrainian  
Refractories Research Institute on the technology and life  
of ladle firebricks. Ogneupory 23 no.12:569-571 '58.

(MIRA 11:12)

1. Ukrainskiy nauchno-issledovatel'skiy institut ogneperev.  
(Ukraine--Research, Industrial)  
(Firebrick--Testing)

LUR'YE, M.A.; KAMENETSKIY, Yu.L.

Use of mathematical methods to calculate consumption standards  
of refractories for steel casting equipment. Ogneupory 27  
no.9:429-432 '62. (MIRA 15:8)

1. Ukrainskiy nauchno-issledovatel'skiy institut ogneuporov.  
(Steel ingots) (Refractory materials)

LUR'YE, M.A.; KAMENETSKIY, Yu.L.; VOLCHENOK, M.Kh.

Economic efficiency of introducing new equipment in the  
manufacture of refractories. Ogneupory 28 no.10:433 '63.  
(MIRA 16:11)

1. Ukrainskiy nauchno-issledovatel'skiy institut ogneuporov.

GINDIN, Ye.Z.; LEYKIN, G.A.; LOZINSKIY, A.M.; LUR'YE, M.A.; MASEVICH,  
A.G.; SEVERNAYA, O.A.; SEMTSOVA, Yu.Ye.; SLOVOKHOTOVA, N.P.;  
TOL'SKAYA, V.A.; TSITOVICH, V.V.

Brief report of the Astronomical Council of the Academy of  
Sciences of the U.S.S.R. on visual and photographic observations  
of artificial earth satellites in 1957-1959. Biul. sta. opt.  
nabl. isk. sput. Zem. no. 6:1-33 '60. (MIRA 14:2)  
(Artificial satellites--Tracking)

LUR'YE, M.A.

Comparison of the number of passages of artificial earth satellites  
observed at the stations of the Soviet Union. Biul.sta.opt.nabl.  
isk.sput.Zem. no.10:23-27 '60. (MIRA 14:11)

1. Astronomicheskii sovet AN SSSR.  
(Artificial satellites--Tracking)

L3317

S/026/62/000/012/005/007  
D036/D114

3,2100  
AUTHOR:

Lur'ye, M.A. (Moscow)

TITLE:

Photographic methods of observing artificial satellites

PERIODICAL:

Priroda, no. 12, 1962, 99-100

TEXT:

A conference was held by the Astronomicheskii Sovet AN SSSR (Astronomical Council of the AS USSR) in Riga at the end of June 1962 to discuss perfection of photographic methods of observing artificial Earth satellites, automation of the data processing, and scientific exploitation of the observation results. Among topics discussed were: the use of high-precision photographic observations for geodesy and navigation; the proposed launching of a geodetic satellite in the USA; the May 1962 session of COSPAR; results of observations of the "Transit" satellites; the possibilities for establishing the exact time from satellite observations. Synchronous observations of the "Echo-1" satellite made in Nikolayev, Pulkovo, Tashkent and Khar'kov showed that geographical coordinates can be determined with an accuracy of  $\pm 50$  m by this method. The ТАФО -АЛ-75 (TAFO-AL-75) camera, X

Card 1/2



Photographic methods of observing ...

S/026/62/000/012/005/007  
D036/D114

designed in Riga and installed at the satellite observation station at the Latviyskiy gosudarstvennyy universitet (Latvian State University), and an automatic electronic device for measuring and processing the negatives, were demonstrated at the conference. The camera photographs the satellite by means of a cassette which oscillates along the direction of the satellite's motion, so that the satellite image is built up. The satellite trail is fixed in the form of separate points corresponding to the moments of time when the cassette was moving in the same way as the satellite image. With this method satellites with a stellar magnitude of  $9^m - 9^m.5$  can be photographed. In Tartu a tracking camera is being planned for photographing artificial Earth satellites brighter than the 7th stellar magnitude. Reports were also delivered on experience gained with the **НАФА-3с/25** (NAFA-Zs/25) camera and the **КПН** (KPN) moving-film camera, and on further improvements. X

Card 2/2

LUR'YE, M.A.  
AID Nr. 972-37 21 May

## PHOTOGRAPHIC OBSERVATIONS OF ARTIFICIAL EARTH SATELLITES (USSR)

Lur'ye, M. A. Priroda, no. 4, 1963, 107-109. S/026/63/000/004/005/005

A conference of Soviet-bloc countries was held in Leningrad late in 1962 to discuss questions dealing with photographic observations of satellites. In East Germany observations of bright satellites are made in Rodewisch, Eulenberg, and Potsdam with Tessar cameras (1 : 3.5, F = 250 mm). In Jena a small camera with telescopic lens is used to determine the exact position (accuracy:  $\pm 1-2''$  in position and  $\pm 0.001^s$  in time) of satellites up to the 4th stellar magnitude. A camera with tracking system is reportedly being developed in Ilmenau to observe faint satellites. Nine observational stations are operating in Poland. In Poznań an automatic camera with Tessar lens (1 : 4.5; F = 360 mm) with a parallactic mounting has been designed to determine the position (accuracy:  $\pm 0.2'$  in position;  $\pm 0.005^s$  in time) of satellites brighter than the 3rd stellar magnitude. A Kodak aerial camera using an Aero Ektar

Card 1/2

-AID Nr. 972-37 21 May

PHOTOGRAPHIC OBSERVATIONS [Cont'd]

S/026/63/000/004/005/005

lens (1 : 2.5; F = 178 mm) is used in Warsaw to determine the position (accuracy: 0.01" in position; 0.01<sup>s</sup> in time) of satellites brighter than stellar magnitude 3.5. In Czechoslovakia aerial cameras employing a louvered shutter and movable plate are used. Stations in China use Zeiss refractors (F = 150 mm). Stations in Bulgaria, China, and Rumania use HADA-30/25 cameras (1 : 2.5; F = 250 mm). In Hungary (Baja, Budapest) and East Germany (Bautzen, Rodewisch) synchronous visual observations are made to determine changes in the height of orbital perigee in a short period of time with an accuracy of 3-5 km.

[DM]

Card 2/2

LUR'YE, M.A. (Moskva)

Photographic methods for satellite observations. Priroda 51  
no.12:99-100 D '62. (MIRA 15:12)

(Artificial satellites—Tracking)

LUR'YE, M.A. (Moskva)

Photographic observations of artificial earth satellites.  
Priroda 52 no.4:107-109 '63. (MIRA 16:4)  
(Artificial satellites--Tracking)

L 22430-65 EEO-2/EWT(d)/FBD/FSF(h)/FSS-2/EWT(1)/FS(v)-3/EEC(k)-2/EWA(d)/T/EEC(c)-2/  
EED-2 Pn-4/Po-4/Pq-4/Pac-4/Pg-4/Pae-2/Pi-4/Pk-4/Pl-4 GW/WR/ST

ACCESSION NR: AR5001309

S/0269/64/000/010/0004/0004

SOURCE: Ref. zh. Astronomiya. Otdel'nyy vypusk, Abs. 10.51.30

AUTHOR: Giudin, Ye. Z., Illenko, M. I., Lur'ye, M. A.

TITLE: Organization of optical observations of artificial earth satellites in the Soviet Union

CITED SOURCE: Byul. at. optich. nablyudeniya iskusstv. sputnikov Zemli, spets. vyp., 1962, 83-83

TOPIC TAGS: artificial earth satellite, earth satellite observation, artificial satellite orbital element, satellite tracking camera, satellite observation station, ephemeris, celestial mechanics

TRANSLATION: The direction of optical observations of artificial earth satellites in the Soviet Union is the responsibility of the Astrosoviet AN SSSR (Astronomical Council, AN SSSR). The observations are made at a network of stations located at universities, teacher's institutes and astronomical institutes. In 1957 there were 66 stations and in 1962 there were 75. Results of observations also are received from a number of foreign countries. This article describes station appa-

Card 1/2

L 22430-65

ACCESSION NR: AR5001309

ratus and stages in its improvement (from AT-1 optical telescopes to automatic tracking cameras). Ephemerides for observations are computed and disseminated by the "Kosmos" (Space) Agency. The results are published in a bulletin of the Astrosovet. This same publication gives the orbital elements of satellites computed at the Institut teoreticheskoy astronomii (Theoretical astronomy institute). Analysis of discrepancies between observations and theory has made it possible to clarify the real accuracy of observations of artificial earth satellites. It has been found (on the basis of data on the satellite 1960 E<sub>3</sub>) that in 1961-1962 in the case of visual observations, there were deviations from the ephemerides of less than 0°.5 in 51.4% of the observations. The number of stations for photographic observations of artificial earth satellites was 30 in 1962. About 15,000 photographs of artificial earth satellites have been obtained in 5 years, of which 70% were suitable for precise analysis. For the most part, the photographs are analyzed by the A. A. Kiselev method (with an accuracy of ±4" in position and ±0<sup>s</sup>.003-0<sup>s</sup>.005 in time). Computations are centralized and in accordance with a program prepared for a Ural 1 electronic computer. In 5 years 3,085 precise positions of about 30 objects have been published. Photometric observations of artificial earth satellites have been made at a number of stations. Bibliography of 34 items. Kh. Potter.

SUB CODE: AA, SV  
Card 17

ENCL: 00

L 29523-65 ZEO-2/EWT(d)/FED/FSF(r)/FSS-2/EWT(1)/FS(-)-3/EEG(k)-2/ENG(v)/EWA(d)/  
 F/EEG(-)-3/FEED-2/FEED(o) 3 Fe-5/Pd-1/Te-1/Pr-1/Pc-1/Pq-1/Pac-1/Pae-2

TIP(c) GW/WR

S/3126/62/000/001/0083/0093

ACCESSION NR: AT5003492

AUTHORS: Gindin, Ye. Z.; Iliencko, M. I.; Lur'ya, M. A.

TITLE: Organization for optical observation of artificial earth satellites in  
 the Soviet Union

SOURCE: Nablyudeniya iskusstvannykh sputnikov Zemli, no. 1, 1957-1962. Moscow,  
 1962. Byulleten' stantsiy opticheskogo nablyudeniya iskusstvannykh sputnikov  
 Zemli; spetsial'nyy vypusk, 83-93

TOPIC TAGS: artificial satellite, satellite tracking / AT-1 telescope, NAFA 3s/25  
 camera, KIM-1 microscope, UIM-21 microscope, Ural 1 computer

ABSTRACT: This work is under the direction of the Astronomicheskii soviet (Astro-  
 nomical Council). Stations have been set up at universities, teaching institutes,  
 and astronomical observatories, and the number is being expanded. More than  
 10,000 individuals have participated in visual observation of satellites in the  
 last five years. In 1962, 75 stations in the Soviet Union operated in the net-  
 work. In the last 5 years, 150 000 observations have been made of 39 000 passages  
 of about 100 different satellites and rockets. Visual observation is made  
 chiefly with AT-1 telescopes. All stations are now equipped with all-wave radio

Card 1/3



L 89528-55

ACCESSION NR: AT5003492

reception, chronometers, and quartz chronographs. When observations must be made against a background of few stars, coordinates of the satellite are determined from orientation of the telescope. The telescope is equipped with graduated circles for such coordinate determination. A number of stations have used camera attachments to record the setting of the telescope during observation of a satellite. Numerous techniques have been worked out for fixing time of observation more precisely, particularly for making the time determination automatic. A number of automatic devices for observation itself have also been devised. Results of all observations are telegraphed to the computing center Kosmos for calculation of ephemerides and all orbital elements. Cooperation is maintained among all stations and all countries, including the Smithsonian Institute of the U.S.A. Many Soviet stations have displayed a precision in visual observation generally within  $0.5^{\circ}$ . Photographic observations are made at a network of stations, chiefly with the standard NAFA-3s/25 camera (D = 10 cm, f = 25 cm). Quartz clocks are used for timing, and KIM-3 and UIM-21 microscopes are used for measuring the negatives. This network consists of 23 stations. In 5 years, 15 000 photographic prints have been obtained, about 70% of which have been suitable for processing by precise methods. The Kiselev method is chiefly used for determination of points (giving an accuracy of  $\pm 4''$  for position and  $\pm (0.003-0.005)$  seconds for time). Deutsch, Turner, and Schlesinger methods of computation

Card 2/3

L 39520-65

ACCESSION NR: AT5003492

are also used. Computations are generally made on a Ural-1 computer; distortion may be determined by programming. Programs are being set up for automatic measurements and computation of equatorial coordinates of satellites. The use of moving film has increased precision of location and gathering power (up to 7th star magnitude). Tables list the satellites and rockets observed and the number of observations made. Photometric observations are also being made. Results are published in the Byulleten' stantsii opticheskogo nablyudeniya ISZ (Bulletin of Stations for Optical Observation of Artificial Earth Satellites). Many papers in this bulletin discuss period of reflectivity change, orientation of rotational axis of the satellite, and methods of photometric observation. Orig. art. has: 4 tables.

ASSOCIATION: Astronomicheskii sovet AN SSSR (Astronomical Council AN SSSR)

SUBMITTED: 00

ENCL: 00

SUB CODE: SV, DC

NO REF SOV: 034

OTHER: 000

Card 3/3

L 32096-65 FSF(h)/FSS-2/EWI(l)/FS(v)-3/EEC(k)-2/ENG(s)-2/ENG(v)/EWA(d)/EEC(t)  
Fo-4/Pe-5/Pq-4/Pi-4/Pae-2 TI/GW

ACCESSION NR: AR5005695

S/0313/64/000/009/0008/0008

SOURCE: Ref. zh. Issledovaniye kosmicheskogo prostranstva. Otd. vyp., Abs. 45  
9.62.53 B

AUTHORS: Lur'ye, M. A.; Shkol'nikova, N. L.

TITLE: Estimate of the accuracy of the visual observations of the 1960 '3 sat-  
ellite made by the USSR stations 12

CITED SOURCE: Byul. st. optich. nablyudeniya iskusstv. sputnikov Zemli, no. 35,  
1962 (1963), 3-6

TOPIC TAGS: satellite observation, observation accuracy, satellite position,  
satellite position deviation/ Epsilon sub 3

TRANSLATION: An estimate of the quality of visual observations of the cabin of  
the first space ship (1960 '3) by Soviet stations in 1961 was carried out re-  
lative to the deviations of the observed positions of the object from those cal-

"APPROVED FOR RELEASE: 03/13/2001

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~~erated for the same instance. Out of a total of 2,011 observations, 74.7% were~~

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APPROVED FOR RELEASE: 03/13/2001

CIA-RDP86-00513R001030920002-4"

L 32096-65

ACCESSION NR: AR5005695

errors 0.0 to 0.5°, 16.7% -- 0.5 to 1.0°, 8.7% -- 1.0 to 2.0°, and 23.2% -- above 2°. The results are discussed briefly. A. K.

SUB CODE: 6V

ENCL: 99

Card 2/2

32666-65 FSS-2/PSP(h)/FBD/EWT(a)/EED-2/EWT(l)/FS(r)-3/EEO(k)-2/EWA(d)/T-2/  
EEO(c)-2/EED-2 Pn-4/Po-4/Pas-4/Pq-4/Pae-2/Pg-4/Pk-4/Pl-4 GW/WR

ACCESSION NR: AF5004171

S/3126/63/000/002/0135/0141

AUTHORS: Illenko, M. I.; Lux'ye, M. A.

82  
81  
8+1

TITLE: Optical observations of artificial earth satellites in the SSSR

SOURCE: Nablyudeniya iskusstvennykh sputnikov Zemli, no. 2, 1963. Warsaw, PAN, 1963, 135-141

TOPIC TAGS: artificial satellite, satellite tracking, AT I telescope, TZK telescope

ABSTRACT: Seventy stations for visual and 24 for photographic observations were manned in 1963. Observations were made on 71 rockets and satellites. Each of these objects is listed in a table (with the number of observations made on it). From 1 October 1962 to 1 October 1963, 52000 observations were made, and more than 500 photographs were taken at Soviet stations. These were supplemented by about 16000 at foreign stations. The data were used by the Institute of Theoretical Astronomy for computing orbital elements. Deviation of observed position from mean orbit was also computed. Soviet stations participated in the first international program--INTEROBS--of synchronous visual observation. This program is coordinated by Dr. M. Illi of Hungary. AT-I tubes were generally used because of greater convenience, but TZK tubes were also employed. Computations show that the radius vector of a satellite in this setup may be determined with an accuracy of 1 km. Synchronous

Card 1/2

L 32666-65

ACCESSION NR: AT5004171

photographic observations were made at 24 stations, including one each in Poland, East Germany, Rumania, and Czechoslovakia. These permit cosmic triangulation and direct application to geodesy. Photometric observations were also made at a number of stations. All data were processed at the Kosmos center. The Astronomical Council continued to publish results of both visual and photographic observations. Twelve bulletins of "Results of Observing Artificial Earth Satellites" were published; six bulletins of individual stations appeared; and the first number of the bulletin "Cosmos" appeared.

... OBSERVATIONS OF OBSERVING ARTIFICIAL EARTH SATELLITES" WERE  
published; six bulletins of individual stations appeared; and the first number of  
the bulletin "Observations of Artificial Earth Satellites" also appeared in 1963.

ASSOCIATION: none

SUBMITTED: 00

ENCL: 00

SUB CODE: SV, DC

... 006

OTHER: 000

Card 2/2



KASIMENKO, T.V.; LUR'YE, M.A.

Conference of the observers of artificial earth satellites. Vest.AN  
SSSR 35 no.6:94 Ja '65. (MIRA 18:8)

LUR'YE, M.A. [deceased]

Groups of fir trunk pests in the southern taiga subzone  
of the European part of the U.S.S.R. Zool.zhur. 44  
no.10:1473-1484 '65. (MIRA 18:11)

1. Moskovskiy lesotekhnicheskii institut.

LUR'YE, M.A. [deceased]

Some little-known stem pests of the Norway spruce. Zool.zhur.  
44 no.11:1726-1727 '65. (MIRA 18:12)

1. Moskovskiy lesotekhnicheskij institut.

LUR'YE, M.G., inzh.; TSIPERMAN, L.A., inzh.

Concerning N.S.Dremiatskii and V.V.Karpov's "Handbook for  
electrical engineers of dwellings and public buildings."  
Svetotekhnika 6 no.8:28-29 Ag '60. (MIRA 13:11)  
(Electric lighting--Tables, calculations, etc.)  
(Dremiatskii, N.S.)  
(Karpov, V.V.).

IUR'YE, M.G., inzh.

Servicing of lighting fixtures in shops of commercial enterprises.  
Svetotekhnika 6 no.11:1-7 N '60. (MIRA 13:11)

1. Gosudarstvennyy proyektnyy institut "Tyazhpromelektroproyekt."  
(Electric lighting)

ALIZADE, F.M.; LUR'YE, M.I., professor, nauchnyy rukovoditel'.

Cases of people contracting rabies following rat-bites and saliva contamination by herbivorous animals; author's abstract. Zhur.mikrobiol.epid.i immun. no.2:65 F '53. (MLRA 6:5)

1. Bakinskiy institut epidemiologii i mikrobiologii Ministerstva zdравo-okhraneniya SSSR. (Hydrophobia)

LUR'YE, M.I.

Simplified method for detecting enteric bacteria. Lab.delo no.4:  
30-31 Jy-Ag '55. (MLRA 8:8)

1. Iz infektsionnogo otdela (zav. N. Ya. Sofiyenko) laboratorii  
(zav. P.A. D'Yachenko) gorodskoy sanitarno-epidemiologicheskoy  
stantsii. (glavnyy vrach F. I. Yuvzhenko, Kiyev)

(BACTERIA,

enteric, deter., simplified technic)

(GASTROINTESTINAL SYSTEM, bacteriology,

enteric bact., determ. simplified technic)

*100 12 111*  
LUR'YE, M.I.

Quick method for identifying intestinal bacteria. Lab. delo 2 no. 3:64  
Ky-Je '57. (Mikr 1957)

1. Iz laboratorii (zav. P.A. D'yachenko) Kiyevskoy gorodskoy  
sanitarno-epidemiologicheskoy stantsii  
(ESCHERICHIA COLI)



LUR'YE, M.I.

Diagnosis of Newcastle's bacillus. Lab.delo 5 no.6:40 H-D '59.

(MIRA 13:3)

(SHIGELLA PARADYSENTERIAE)

LUR'YE, M.I.; DADASHEVA, L.E.

Effect of the conditions of cultivation on the variability of  
typhoid fever bacteria. Izv. AN Azerb. SSR. Ser. biol. i med. nauk  
no.5:139-145 '60. (MIRA 14:9)

(EBERTHELLA TYPHOSA)

MEDZHIDOV, B.F., doktor med. nauk, prof.; LUR'YE, M.I., prof.

[Bacterial dysentery; materials from the Azerbaijan  
S.S.R.] Bakterial'naiia dizenteriiia; po materialm  
Azerbaidzhanskoi SSR. Baku, Azerbaidzhanskoe gos. izd-  
vo, 1964. 257 p. (MIRA 17:12)

LUR'YE, M. I. Cand Tech Sci -- (diss) "Study of the dynamics and economy  
of accelerating automobiles by the method of stand tests." Mos, 1958.  
13 pp (Min of Higher Education USSR. Mos Motor Vehicle and Road Inst),  
150 copies (KL, 36-58, 112)

LUR'YE, M.I.

AUTHOR: Lur'ye, M.I.

113-58-6-11/16

TITLE: The Determination of the Coefficient of Rotatory Masses of the Automobile by the Method of Test Stand Trials (Opredeleniye koeffitsiyenta ucheta vrashchayushchikhsya mass avtomobilya metodom stendovyx ispytaniy)

PERIODICAL: Avtomobil'naya promyshlennost', 1958, Nr 6, pp 32-34 (USSR)

ABSTRACT: In the analysis of the construction of a newly built car, as in the capacity rating, it is necessary to know the inertia moments of rotatory masses of the engine  $J_m$  and of the wheels  $J_k$ , whereby the determination of the coefficient for rotatory masses  $\delta$  can be found and which strongly influences the intensity and fuel economy of the acceleration of the car. Until now these masses were calculated approximately by a formula proposed by Academician Ye.A. Chudakov:

$$\delta = 1.03 + 0.05i_k^2$$

where  $i_k$  is the transmission ratio of the gear box. This formula, being purely empirical, does not allow for the features of construction and cannot be used for modern cars. The author proposes a method for the calculation of the rotatory

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113-58-6-11/16

The Determination of the Coefficient of Rotatory Masses of the Automobile by  
the Method of Test Stand Trials

masses. The method is described in detail.  
There are 2 tables, 2 figures and 1 Soviet reference.

ASSOCIATION: Moskovskiy avtodorozhnyy institut (The Moscow Auto-Road In-  
stitute)

Card 2/2

1. Automobile industry--USSR 2. Rotation--Masses--Determination

AUTHOR: Lur'ye, M.I. SOV-113-58-8-7/21

TITLE: Obtaining Acceleration Characteristics of an Engine by Means of Stand Tests of the Car (Polucheniye razgonnoy kharakteristiki dvigatelya putem stendovykh ispytaniy avtomobilya).

PERIODICAL: Avtomobil'naya promyshlennost', 1958, Nr 8, pp 22-25 (USSR)

ABSTRACT: The author gives a theoretical description of the method for determining the acceleration characteristics of the car-engine by means of stand tests. This method is based on the works of the following researchers: B.S. Fal'kevich, D.A. Rubets, V.M. Arkhangel'skiy, etc. During the stand tests, an electro-dynamometer designed by M.I. Briskin and L.I. Krasil'shchik, as well as a device, designed by V.A. Ulasevich, for tracing the fuel consumption before the float chamber were utilized. The cars utilized for these stand tests were the small displacement passenger cars of the "Moskvich-402" and "Volkswagen" types. These two car-types had already been compared during road tests. It has been stated that, for the

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SOV-113-58-8-7/21

Obtaining Acceleration Characteristics of an Engine by Means of Stand Tests of the Car

same specific power, the acceleration characteristic and the fuel efficiency of the "Volkswagen" type were higher than those of the "Moskvich-402" type. For improving the acceleration characteristic of the "Moskvich-402" engine, its standard carburetor of the "K-44" type was rebuilt according to details given in the article. There are 3 graphs, 1 schematic diagram and 1 table.

ASSOCIATION: The Moskovskiy avtodorozhnyy institut (Moscow Highway Institute)

1. Automobile industry--USSR
2. Engines--Test methods
3. Engines--Performance
4. Dynamometers--Applications

Card 2/2



SOV/110-58-9-11/20  
AUTHORS: Lozanovskiy, A.L. and Lur'ye, M.I. (Engineers)

TITLE: Calculation of the Current in the Circuits of  
Transitional Reactors (of transformer tap-changers) for  
A.C. Rectifier Locomotives (K raschetu toka v tsepi  
perekhodnogo drosselya vypryamitel'nykh elektrovozov  
peremennogo toka)

PERIODICAL: Vestnik Elektropromyshlennosti, 1958, Nr 9, pp 47-50 (USSR)

ABSTRACT: In alternating-current locomotives type NO, the voltage is controlled by altering the connections of the transformer secondary winding, as shown in Fig 1. During transition from one position to another the appropriate terminals are connected across reactors, which serve to limit the current during the transition. It was found on test that when the reactors are connected, current surges occur that damage the switchgear and transformer windings. It was, therefore, necessary to calculate the current in the circuit consisting of the reactor and the transformer winding. The transitional reactor consists of two coils on a common laminated core with an air-gap; the magnetisation characteristic is given in Fig 2. A formula is derived for the current/flux relationship.

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SOV/110-58-9-11/20

Calculation of the Current in the Circuits of Transitional Reactors  
(of Transformer Tap-changers) for a.c. Rectifier Locomotives

The basic equation required in the calculations is first derived and a method of solution by successive approximations is given. The conditions under which current surges are likely to be greatest are given; this simplifies the calculations. Formulae are written for evaluating the error in the determination of surge current. It is concluded that the proposed method of calculating the surge current gives the magnitude and wave-shape of the current when the transitional reactor is switched, allowance being made for saturation and active resistance. The procedure can be applied to the design of any alternating-current magnetic system under

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SOV/110-58-9-11/20  
Calculations of the Current in the Circuits of Transitional Reactors  
(of Transformer Tap-changers) for a.c. Rectifier Locomotives

transient conditions, subject to minor limitations. A numerical calculation of a particular case is then given; the calculated and experimental values are compared in Table 2, with good agreement.

There are 2 tables, 2 figures and 3 Soviet references.

SUBMITTED: September 30, 1957.

1. Saturable reactors--Electricla properties
2. Transformers
- Equipment
3. Electric current--Mathematical analysis
4. Transfer switches--Circuits

Card 3/3

12(2)

SOV/113-59-4-9/19

AUTHOR: Lur'ye, M.I.

TITLE: A More Precise Method of Calculating Dynamics and Fuel Economy During the Acceleration of an Automobile

PERIODICAL: Avtomobil'naya promyshlennost', 1959, Nr 4, pp 21-24 (USSR)

ABSTRACT: The author suggests a more precise calculation method for the dynamics and the fuel economy factors of an automobile during acceleration. This method provides a greater accuracy in determining the acceleration parameters of an automobile, among them the instantaneous power balance under consideration of the peculiarities of the engine operation during acceleration. The method may be used for projecting when the engine acceleration characteristic is given, and particularly during the tests of an experimental automobile. Usually, the engine speed characteristic is used for the dynamic calculation. This characteristic is obtained during engine operation under steady state conditions. However, the engine power is not only a function of the revolutions but also of the angular speed of the crankshaft. In the majority of cases, the engine

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SOV/113-59-4-9/19

A More Precise Method of Calculating Dynamics and Fuel Economy During the Acceleration of an Automobile

works less efficiently during acceleration than under steady state conditions. This causes increased fuel consumption and reduced power during acceleration. The conventional dynamic calculations do not take this factor into consideration. Consequently, the error in determining the acceleration path of an automobile may attain a magnitude of 15-20%, especially during acceleration in low gear. The conventional dynamic calculation method should be used only for preliminary evaluation when planning the design of a new automobile. The author states that problems concerning fuel economy calculation during the acceleration of an automobile and calculations of the instantaneous power balance have not yet been fully solved. The instantaneous power balance and the fuel economy during the acceleration may be determined by more accurate calculations based on initial data of the engine acceleration characteristic obtained during test stand experiments. For the acceleration of an automobile on an even road, the author presents the following equation of the instantaneous power

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SOV/113-59-4-9/19

A More Precise Method of Calculating Dynamics and Fuel Economy During the Acceleration of an Automobile.

balance:

$$N_{dB} = N_{jm} + N_{ocrm} + N_{jk} + N_c + N_{ja} = f(\tau),$$

where  $N_{dB}$  - actual engine power during acceleration;  $N_{jm}$  - power spent for the acceleration of the rotating masses of the engine;  $N_{ocrm}$  - power losses in the transmission;  $N_{jk}$  - power spent for the acceleration of the rotating masses of the wheels;  $N_c$  - power spent for overcoming rolling and air resistance;  $N_{ja}$  - power spent for the acceleration of the forward moving masses of the automobile. There are 4 graphs and 2 Soviet references.

ASSOCIATION: NAMI

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12(2)

SOV/113-59-7-8/19

AUTHOR: Lur'ye, M. I., Candidate of Technical Sciences

TITLE: The Selection of Transmission Gear Ratios for Automobiles With Low Engine Displacement

PERIODICAL: Avtomobil'naya promyshlennost', 1959, Nr 7, pp 22-26 (USSR)

ABSTRACT: At NAMI, a method was developed for determining the transmission gear ratio of automobiles with low engine displacements. The inertia of rotating masses, pick-up speed for passing trucks and the grip of the driven wheels were considered. In "The Theory of the Automobile" by G.V. Zimilev [Reference 1] the influence of the inertia of the rotating masses was not considered. In N.K. Kulikov's paper [Reference 2] the influence of the rotating masses was considered, but the influence of this parameter on the

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SOV/113-59-7-8/19

The Selection of Transmission Gear Ratios for Automobiles With Low Engine Displacement

dynamics of an automobile was neglected. The author uses the NAMI method for a comparative analysis of the transmission gear ratios of the "Moskvich-402", "Moskvich-407" and the German "Volkswagen". The author states that the "Moskvich-402" has a too high moment of the inertia of rotating masses  $J_m$  compared to the German "Volkswagen". He presents the following conclusions 1) Automobiles with low engine displacement should have four-speed transmissions. 2) The fourth speed should be preferably direct. 3) The gear ratio of the final drive should be selected in such a manner that the rpm number corresponding to maximum power is not exceeded by more than 5% at maximum speed. 4) The gear ratio of the first speed should provide a moment to the speed which is about

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SOV/113-59-7-8/19

The Selection of Transmission Gear Ratios for Automobiles With Low Engine Displacement

25% of the maximum, i.e. it should exceed by approximately 4 times the gear ratio of the fourth speed. 5) The gear ratio of the third speed should provide an intensive moment up to a speed of 80 km/h, which is used for safe passing of trucks. 7) For a four-stroke engine, the value of the inertia moment of the rotating masses should be selected in such a way that it would amount to about 0.006 of the maximum torque developed by one engine cylinder.

ASSOCIATION: NAMI

Card 3/3

LUR'YE, M.I., kand.tokhn.nauk; ALESHIN, V.V.; SYTIN, K.Yu.

Device for recording instantaneous fuel consumption. Avt.  
prom. no.1:35-36 Ja '60. (MIRA 13:5)

1. Gosudarstvennyy soyuznyy ordena Trudovogo Krasnogo Znameni  
nauchno-issledovatel'skiy avtomobil'nyy i avtomotorny institut.  
(Automobiles--Fuel consumption--Measurement)

LUR'YE, M., kand.tekhn.nauk; TOMILIN, N.M.

Using the method of chalk prints for determining the rolling  
radius of an automobile wheel. Avt.prom. no.3:37 Mr '60.

(MIRA 13:6)

1. Gosudarstvennyy soyuznyy ordena Trudovogo Krasnogo Znameni  
nauchno-issledovatel'skiy avtomobil'nyy institut.  
(Automobiles--Wheels)

KUROCHKA, Aleksandr Leont'yevich, kand.tekhn.nauk, nauchnyy sotrudnik;  
LUR'YE, Marat Iosifovich, nauchnyy sotrudnik

Calculating transient processes of electric locomotive circuits on  
digital computers. Izv.vys.ucheb.zav.; elektromekh. 3 no.2:  
38-51 '60. (MIRA 13:7)

1. Novocherkasskiy nauchno-issledovatel'skiy institut  
elektrovozostroyeniya.  
(Electronic digital computers)