

ACCESSION NR: AP4038651

reach the anode are discussed. Orig. art. has: 1 figure and 5 formulas.

ASSOCIATION: none

SUBMITTED: '03May63

DATE ACQ: 05Jun64

ENCL: 00

SUB CODE: EG

NO REF SOV: 005

OTHER: 002

Card 2/2

YANKINA, A.A.

Steady operation of a plane magnetron. Radiotekh. i elektron.  
9 no.5:890-892 My '64. (MIRA 17:7)

ARKHANGEL'SKIY, A.S.; KRMYNIN, A.V.; KUCHURIN, S.F.; MASTERITSYN, N.N.;  
SOKOLOV, P.G.; FEYGIN, I.Ya.; KHOKHLOV, L.P.; YANKINA, A.P.; KU-  
CHURIN, S.F., redaktor; VERINA, G.P., tekhnicheskij redaktor

[Rate book for railroad transportation] Spravochnik po tarifam  
zheleznodorozhnogo transporta. Moskva, Gos.transp. zhel-dor.  
izd-vo, 1955. 326 p. (MIRA 9:3)

(Railroads--Rates)

KATSNEL'SON, L.S.; GLADSHTEYN, M.S.; YANKINA, N.I.

Chemical milling of aluminum alloys. Mashinostroenie no. 5:90-  
93 S-0 '63. (MIRA 16:12)

YANKINA, T.I., inzh.

Investigating the operation of steam chip packers. Bun. prom. 34  
no.4:7-12 Ap '59. (MIRA 12:7)

1. Leningradskiy inzhenerno-stroitel'nyy institut.  
(Woodpulp industry--Equipment and supplies)

YANKINA, T.I., inzh.

Design of a nozzle in steam chip packers. Bum.prom. 36 no.2:20-21  
F '61. (MIRA 14:2)

(Woodpulp industry--Equipment and supplies)

YANKINA, T.I., inzh.

Air supply to ship quarters by stream layers. Sudostroyenie 30  
no.10:34-36 0 '64. (MIRA 17:12)

L 40088-66 TCH/GD

ACC NR: AT6017436

(N)

SOURCE CODE: UR/0000/65/000/000/0217/0225

AUTHOR: Yankina, T. I.

32  
61

ORG: Central Maritime Scientific Research Institute (Tsentral'nyy nauchno-issledovatel'skiy institut morskogo flota)

TITLE: New air distribution techniques in air conditioning systems on maritime transport vessels

SOURCE: Vsesoyuznaya konferentsiya po elektrosnabzheniyu i konditsionirovaniyu vozdukha na transporte. Riga, 1965. Energosnabzheniya i konditsionirovaniye vozdukha na transporte (Power supply and air conditioning in transportation); materialy konferentsii. Riga, Izd-vo Zinatne, 1965, 217-225

TOPIC TAGS: air conditioning system, air flow, *marine equipment, ship*

ABSTRACT: A description is given of air conditioning systems in use in Soviet and in foreign merchant fleets. To determine the hygienic effectiveness of various types of air distribution systems, the Central Maritime Scientific Research Institute carried out experiments on both horizontal and updraft types on a number of different ships. Orig. art. has: 6 figures.

SUB CODE: 13/      SUBM DATE: 06Sep65

Card 1/1



YANKINA, V.P.

Experimental studies on the toxicity of a basic brightly green dye (brilliant green). Farm.1 toks. 23 no.6:557-558 N-D '60.  
(MIRA 14:3)

1. Kafedra gigiyeny truda (zav. - prof. B.B.Bykhovskiy) Permskogo meditsinskogo instituta.  
(BRILLIANT GREEN—TOXICOLOGY)

YANKINA, V.P., assistant

Experimental studies on the toxicity of basic violet K (methylviolet).  
Gig.i san. 26 no.3:96-97 Mr '61. (MIRA 14:7)

1. Iz kafedry gigiyeny truda Permskogo meditsinskogo instituta.  
(METHYL VIOLET--TOXICOLOGY)

FEDKOVA, Z.P.; YANKINA, Z.S.

Turbulent heat exchange of the surface of the Chukchi  
Sea with the atmosphere. Trudy AANII 264:44-51 '63.

(MIRA 17:6)

FEDOROVA, Z.P.; YANKINA, Z.S.

Inflow of the Pacific Ocean water through the Bering Strait into the Chukchi Sea. Okeanologiya 3 no.5:777-784 '63. (MIRA 16:11)

1. Arkticheskiy i Antarkticheskiy nauchno-issledovatel'skiy institut.

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ACCESSION NR: AR4044538

is  $\gt 0$  the ice temperature can be assumed equal to zero. In this case turbulent heat

Card 8/4





NIKOLYUK, F., inzh.; NAUMOV, Yu., inzh.; YANKIV, I., inzh.

Manufacture of standard prestressed beams with an 18  
span and electrothermally stressed reinforcement. Prom. stroi.  
1 inzh. soor. 5 no.5:41-44 S-0 '63. (MIRA 16:12)

YANKIVSKIS, M. [Jankivskis, M.] inzh.-ekonomist

Improving the pay system in planning organizations. Sots. trud.  
4 no.16:128-130 0 '59 (MIRA 13:3)

1. Planovo-proizvoditel'nyy otdel Instituta proyektirovaniya gorod-  
skogo i sel'skogo stroitel'stva Litovskoy SSR.  
(Lithuania--Architecture--Designs and plans)  
(Wages)

YANKIVSKIS, M. [Jankivskis, M.]

It is necessary to change the procedure for personnel registration.  
Fin. SSSR 23 no.7:55-57 JI '62. (MIRA 15:7)

1. Nachal'nik otдела truda i zarabotnoy platy proyektnogo  
instituta "Litgiprozem".  
(Lithuania--Personnel management)

YANKIVSKIS, M. [Jankovskis, M.]

Volume of the finished product is the main work index of designing and planning organizations. Fin. SSSR 37 no.10:52-53 0 '63.

(MIRA 17:2)

1. Nachal'nik otdela proyektного instituta "Litgiprozem".

YANKO, A.D.

Lighting units for beet stations. Sakh. prom. 32 no. 7:23-25 Jy '58.  
(MIRA 11:8)

1. Poltavskiy sakhsveklotrest.  
(Sugar industry--Equipment and supplies)  
(Lighting)

YANKO, A.D.

Using autotransformers, Sakh. prom. 33 no.4:50-52 Ap '59.  
(MIRA 12:6)

1. Poltavskiy sakhsveklotrest.  
(Electric transformers)  
(Sugar industry--Equipment and supplies)

YANKO, A.M.

Progressive mineral prospecting crew. Razved.i okh.nedr  
26 no.5:49-50 My '60. (MIRA 13:7)

1. Normativno-issledovatel'skaya partiya Irkutskogo geologi-  
cheskogo upravleniya.  
(Irkutsk Province--Prospecting)

YANKO, A.M.

Some results of the transition to the shortened workday and  
the new wage system. Razved. i okh. nedr 27 no.5:49-53 My  
'61. (MIRA 14:9)

1. Vostochno-Sibirskaya normativnaya issledovatel'skaya  
partiya.

(Hours of labor) (Wages)



YANKO, A.M.

Irkutsk prospectors are trying to create sources of mineral and raw material supply in Eastern Siberia. Razved.i okh. nedr 29 no.1:60-61 Ja '63. (MIRA 16:2)

1. Irkutskoye geologicheskoye upravleniye.  
(Siberia, Eastern--Prospecting)

YANKO, A. P.

Cand Chem Sci

Dissertation; "Solubility and Solid Phases of the System: Chlorides,  
Lithium and Potassium Sulfates and Water." 15/11/50

Inst of General and Inorganic Chemistry imeni N. S. Kurnakov, Acad Sci USSR

SO Vecheryaya Moskva  
Sum 71

DRUZHININ, I.G.; YANKO, A.P.

Periodate method of determining lithium. Uch.zap.Biol.-pochv.fak.  
Kir.un. no.3:3-6 '52. (MLRA 10:5)  
(Lithium--Analysis)  
(Potassium periodates)

11. 11. 11.

✓ Hydrochemical characteristics of Lake Altai. P. F. Buzhikarev and A. P. Vanko. *Izvest. Fiz. Khim. Nauch.-Issledovatel. Inst. Irkutsk. Univ.* No. 1/2, 225-8 (1953). Referat. *Zhur. Khim.* 1955, No. 3. 1. The composition of salts and the pH of the waters in the various springs feeding the lake and in the lake proper at various times of the year are given. M. Horsch

GP ①

---

✓ Hydrochemical characteristics of the Baushevskii Pond.

P. F. Bochkarev and A. P. Yanko. *Izvest. Fiz.-Khim. Nauch. Issledovatel. Inst. Irkutsk. Univ.* 1, No. 1/2, 229-37 (1953). *Referat Zhur. Khim.* 1953, No. 374.—Chem. analysis of the lake at several depths and of the water of the springs feeding the pond are given. M. Hosh

GP 0

YANKO, A. P.

Periodate method for determination of lithium. I. G. Drushinin and A. P. Yanko. *Uchenye Zapiski, Khim. Seriya*, (1954), 1954, No. 4, 3-6; *Repts. Zhur. Khim. 1954*, No. 11217. The method of Rogers and Caley (CA 37: 2245) was tested. In detg 0.9 mg. Li in the presence of 0.5 mg of KCl and K<sub>2</sub>SO<sub>4</sub>, the abs. error did not exceed 0.3 mg. The best results were obtained in detg Li in solns contg not more than 60 mg per 1.0 ml. I. M. Huseh

MAST

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YANKO, A. I.

10915\* (Solubility Isotherms of the Ternary System Chloride-Lithium Sulfate-Water at 25 C.) Izoterma rastvorimosti trojnoj sistemy khlorid-sulfat litija-voda pri 25°. I. G. Druzhinin and A. P. Yanko, *Doklady Akademii Nauk SSSR*, v. 94, no. 3, Jan. 21, 1954, p. 481-483.  
Method of plotting diagrams. Results indicate possibility of quantitative precipitation of  $\text{Li}_2\text{SO}_4$  from saturated solutions of  $\text{LiCl}$ . Table, graph. 4 ref.

(2) 4

9-28-54

Inst. Chem., Kirgiz Affil - A.S. and Irkutsk State U. im. Zhukovsk

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APPROVED FOR RELEASE: 09/01/2001

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C/005/60/000/007/002/004  
F031/F004

AUTHOR: A. P. Yanko

TITLE: Inorganic synthesis and its tasks

PERIODICAL: Hua Hsüeh T'ung Pao, no. 7, 1960, 7-10

TEXT: This paper was read by the author, a Soviet chemist, before the May 4th Scientific Reporting Conference held at the Peking University in 1960. It presents a general introduction to the development and application of inorganic synthesis, achievements in the field made by the USSR in recent years, and general developmental trends in organic synthesis. Synthesis of binary compounds, semiconductor materials, and oxidizing peroxides are noted as most important in modern industry. Synthetic methods and new techniques have been developed which will expedite progress in the inorganic synthetic field, however, the author considers that Mendeleev's periodic table and the elements' periodic system are still the fundamental bases of research. The task confronting chemists is how to produce more compounds on a larger scale in

Card 1/2

C/005/60/000/007/002/004  
F031/F004

Inorganic synthesis and its ...

laboratories. The author praises Communist China for the achievements made in the past ten years. Chemical production for 1957 was rated as 379% higher than that of 1952. Production of chemical reagents in China has reached self-sufficiency and the future of Chinese inorganic synthetic chemistry is bright. The article was translated by Huang Chu-po (7806/4554/3134).

Card 2/2

*YANKO, N. M.*  
ARKHIPETS, Ye. Ya. (Kiyev); BONDAROVICH, I.M. (Khar'kov); BULANOV, V.H. (Kiyev);  
GALUSKIN, V.B. (Kiyev); JOGOTSI, G.A. (Mikolayev); GORBUNOVA, N.H.,  
(Kiyev); GORLITSKIY, B.A. (Kiyev); DYADYUSHA, G.G. (Kiyev); KATSNEL'SON,  
I.Ye. (Dnepropetrovsk); KVITCHUK, B.A. (Kiyev); KIRILLOV, I.A., (Krym)  
KONOPLYASOVA, N.S. (Chernovtsy); NIKOL'SKIY, V.V. (Kiyev); PONOMARENKO,  
A.A. (Stanislav); PESCHANSKIY, A.I. (Kiyev); POPOV, V.H. (Kiyev);  
PTASHNIKOVA, I.V. (Uzhgorod); STESHENKO, N.G. (Kiyev); CHAYKIN, M.M.  
(Vinnitsa); SHAPOSHNIKOVA, N.N. (Kiyev); SHPORTYUK, V.I. (Kiyev);  
YANKO, N.M. (Stalinskaya oblast'); SVSCHNIKOVA, N., redaktor;  
SMORODSKIY, V., tekhnicheskij redaktor

[Tourist routes through the Ukraine] Turistskie marshruty po Ukraine.  
Kiev, Izd-vo TsK IKSNU "Molod'," 1957. 368 p. (MIRA 10:8)  
(Ukraine--Description and travel)

<sup>N.</sup>  
YANKO, Mikola Timofiyovich; ABRAMS'KIY, Yu., redaktor; KLIMENKO, L.,  
tekhnichnyi redaktor

[Homemade visual aids for teaching geography and ways of using  
them] Samorobni naochni posibnyky z geografii ta roabota z nymy.  
Kyiv, Derzh.uchbovo-pedagog.vyd-vo "Radians'ka shkola," 1957. 95 p.  
(Teaching--Aids and devices) (MLRA 10:6)  
(Geography--Study and teaching)

YANKO, N.T.

Homemade plastic aids for geography classes. Geog. v shkola 21  
no. 1:48-51 Ja-F '58. (MIRA 11:7)

1. Alekseyevo-Drushkovskaya shkola Stalinskoy oblasti.  
(Physical geography--Audio-visual aids)

YANKO, Nikolay Timofeyevich; SHPORTYUK, V.I., red.; GORBUNOVA, N.M.  
[Horbunova, N.M.], tekhn. red.

[Home-made visuals aids for geography and how to work with  
them] Samorobni naichni posibnyky z geografii ta rabota z  
nymy. 2., perer. i dop. vyd. Kyiv, Radians'ka shkola, 1962.  
184 p. (MIRA 16:4)

(Geography--Audio-visual aids)



YANKO, P.I., inzh.; STEPANOV, L.A., inzh.; BOYKO, A.P., inzh.

Washing of regenerative air heaters of boilers operating on sulfur  
containing mazut. Energetik 12 no.3:12-13 Mr '64. (MIRA 17:4)

KRUK, M.T., inzh.; YANKO, P.I., inzh.; STEPANOV, L.A., inzh.

Special features in starting and operating the TGM-34 boiler  
on sulfur bearing mazut. Elek. sta. 35 no.5:2-7 My '64.  
(MIRA 17:8)

YANKO-TRINITSKIY, A. A.

157T7

USSR/Electricity - Literature Dec 49  
Transient Electric Phenomena

"Review of K. A. Krug's Book, "Transient Phenomena  
in Linear Electrical Circuits," Docent A. A. Yanko-  
Trinitskiy, Cand Tech Sci, Chair of Theoretical Elec  
Eng, Ural Polytech Inst, 2 pp

"Elektrichestvo" No 12

Despite defects, book contains wealth of useful  
theoretical and practical material. Contains the-  
oretical section and examples of application of  
theory. Published by Gosenergoizdat, 1948. 344 pp,  
19 rubles.

157T7

YANKO-TRINITSKIY, A. A.

USSR/Electricity - Motors, Induction    Mar 51  
Transients

"Equations For Transient Electromagnetic Processes in Induction Motors, and Their Solution,"  
A. A. Yanko-Trinitskiy, Cand Tech Sci, Ural  
Polytech Inst

"Elektrichestvo" No 3, pp 18-25

Examines the most natural method for transforming the egs of an induction motor. Shows the geometrical and phys meaning of the transformations. Selects the most useful forms of the egs.

201P23

USSR/Electricity - Motors, Induction    Mar 51  
(Contd)

Gives an exact soln of the transient egs at const speed, and an approx one for varying speeds. Submitted 26 May 50.

201P23

YANKO-FRINTSEV, A. A.

189132

USSR/Electricity - Literature  
Circuit Analysis  
MAY 51

"Review of M. A. Ferekalin's Electric Circuits,"  
Docent A. A. Yanko-Frintsevy, Cand Tech Sci,  
Head, Theoretical Elec Eng Chair, Ural Polytech  
Inst

"Elektrichestvo" No 5, p 90

Describes basic methods of calcg and analyzing  
linear elec circuits, magnetic circuits, elec  
circuits with steel cores, and some nonlinear  
circuits. Contains, among others, chapters on

189132

USSR/Electricity - Literature  
Circuit Analysis (contd)  
MAY 51

calcg nodal voltages and on transient phenom-  
ena. Over-all appraisal of the book is  
favorable. Gosenergoizdat, 1950, 511 pp,  
25 rubles.

189132

YANKO-TRINITSKIY, Doc A. A.

USSR/Electricity - Operator Calculus Engineering Education

Jul 52

"Discussion: On V. Yu. Lomonosov's Article 'Operator Calculus In Electrical Engineering Education'," Prof G. A. Sisoyan, Dr Tech Sci, Georgian Polytech Inst imeni Kirov; Prof G. S. Aronzon, Dr. Tech Sci, Moscow Automobile Highway Inst; Cand Tech Sci M. Yu. Shukhatovich, Inst of Mining; Prof A. Ya. Berger, Leningrad Elec Eng Inst of Commun; Doc A. A. Yanko-Trinitskiy, Cand Tech Sci, Ural Polytech Inst

"Elektrichestvo" No 7, pp 87-91

Above authors, continuing discussion of Lomonosov's article (article and 1st part of discussion appeared in "Elektrichestvo," No 1, 1952), generally disagree with Lomonosov's position that operator calculus is unimportant in electrical engineering education.

PA 237T37

YANKO-TRINITSKIY, A. A.

Electric Engineering - Periodicals

Raising the quality of scientific editing, Elektrichestvo No. 1, 1953.

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

YANKO-TRINITSKIY, A.A., dotsent, kandidat tekhnicheskikh nauk.

"Mathematical methods for studying electric machines." L.N.Gruzov.  
Reviewed by A.A.Ianko-Trinitskii. Elektrichestvo no.3:94-96 Mr '54.  
(MLRA 7:4)

1. Ural'skiy politekhnicheskiy institut.  
(Gruzov, L.N.) (Electric machinery)



YANKO-TRINITSKIY, A. A.

AID P - 1280

Subject : USSR/Electricity

Card 1/2 Pub. 27 - 4/30

Author : Yanko-Trinitskiy, A. A., Kand. of Tech. Sci., Dotsent

Title : Rate of damping of transients in magnetically coupled circuits

Periodical : Elektrichestvo, 1, 19-23, Ja 1955

Abstract : The author introduces a transient state analysis which permits estimating the time of duration of transient processes in electrical machinery with symmetrical three-phase stator and rotor and at a constant rotating speed. The author starts his analysis by finding the dependence of the damping time constants of the separate components of free currents in two magnetically coupled circuits, first, from the circuits' L and R parameters, and then from the degree of the flux linkages of these circuits. He introduces respective damping-time constants and nomograms for their determination, and analyses limiting cases. Further, the author proves that these functional

Elektrichestvo, 1, 19-23, Ja 1955

AID P - 1280

Card 2/2 Pub. 27 - 4/30

relationships and nomograms are entirely applicable in determining the damping time of free currents in an im- mobile induction motor. He finds the rate of change of damping time of these currents when the motor rotates with constant speed. He introduces the conception of "critical speed of rotation" and analyses limiting cases. This analysis can be extended to an idealized synchro- nous machine as well. Five diagrams, 7 Russian refer- ences (2, 1931-1935; 5, 1949-1953).

Institution : Ural Polytechnical Institute

Submitted : Je 18, 1954

Translation from: Referativnyy Zhurnal, Elektrotehnika, 1957, Nr 1, p. 126 (USSR) 112-1-768 D

AUTHOR: Yanko-Trinitkiy, A. A.

TITLE: Certain Analytical Ways of Investigating Transients in Synchronous Machines (Nekotoryye analiticheskiye puti issledovaniya perekhodnykh protsessov v sinkhronnykh mashinakh)

ABSTRACT: Bibliographic entry on the author's dissertation for the degree of Doctor of Technical Sciences presented to the Leningrad Polytechnical Institute (Leningr. politekhn. in-t) Leningrad, 1956.

ASSOCIATION: Leningrad Polytechnical Institute (Leningr. politekhn. in-t, Leningrad)

Card 1/1

NEYMAN, L.R., professor; RAKHIMOV, G.R., kandidat tekhnicheskikh nauk; YANKO-  
TRINITSKIY, A.A., kandidat tekhnicheskikh nauk.

The 125th anniversary of Faraday's law of electromagnetic induction.  
Elektrichestvo no.8:80-82 Ag '56. (MLRA 9:10)

1.Chlen-korrespondent AN SSSR (for Neyman)  
(Faraday, Michael, 1791-1867)

YANKO-TRINITSKIY, A.A.

AUTHOR: YANKO-TRINITSKIY, A.A., cand. techn. sc. 105-8-3/20  
TITLE: Electro-Mechanical Transients in Synchronous Machines. (Elektro-  
mokhanicheskkiye perekhodnyye protsessy v sinkhronnykh mashinakh,  
Russian)  
PERIODICAL: Elektrichestvo, 1957, Nr 8, pp 16 - 22 (U.S.S.R.)

ABSTRACT: It is shown how the methods of the theory of qualitative dif-  
ferential equations are to apply to the investigation of non-  
linear equations of transition processes in a synchronous machine.  
At first, in order to explain the method, a simple case of a  
synchronous machine without damping cells, connected by lines  
with rails of a strong system is investigated. The equations  
of the electromagnetic transition process are derived. Then, in  
order to be able to judge the dynamic stability of the machine,  
the Lyapunov functions are introduced into the obtained equations.  
For a deepening of the analysis, the stream function is intro-  
duced and the solution of the equations is sought in the case  
of zero-approximation. The periodic motion in the case of zero-  
approximation is calculated, then this is taken as basis and,  
with the assumption that the period will only little change on  
fading, the first approximation is calculated. At last the re-  
peated oscillations are investigated and it is shown how the  
damping windings can be taken into account in the calculation.

Card 1/2

Electro-Mechanical Transients in Synchronous Machines. 105-8-3/20

Summarizing the author stated that in all practical cases one may confine oneself to the two approximations, namely the zero- and the first approximation, whereby sufficient accuracy for practice is obtained.

(4 illustrations, 8 Slavic references)

ASSOCIATION: Ural Polytechnical Institute "KIROV" (Ural'skiy  
politekhicheskiy institut im. KIROV)  
PRESENTED BY:  
SUBMITTED: 5.1.1957  
AVAILABLE: Library of Congress

Card 2/2

8(5)

PHASE I BOOK EXPLOITATION

SOV/2186

Yanko-Trinititskiy, Aleksandr Aleksandrovich

Novyy metod analiza raboty sinkhronnykh dvigateley pri rezkoperemennykh

nagruzkakh (New Method for Performance Analysis of Synchronous Motors During Sudden Changes in Load) Moscow, Gosenergoizdat, 1958. 102 p.

Errata slip inserted. 5,000 copies printed.

Ed.: A.V. Ivanov-Smolenskiy: Tech. Ed.: K.P. Voronin.

**PURPOSE:** This book is intended for engineers engaged in the research and design of synchronous-motor electric drives for operation under suddenly changing loads.

**COVERAGE:** The author describes a method of analyzing the transients and dynamic stability of synchronous motors during sudden changes in load. He discusses the equations, equivalent circuits, param-

Card 1/7

New Method for Performance Analysis (Cont.)

SOV/2186

eters and characteristics of synchronous machines. He also explains the basic problems involved in the analysis of synchronous-motor operation during a sudden, prolonged increase of load and presents methods for taking into account other factors. No personalities are mentioned. There are 48 references: 31 Soviet (including 1 translation), 15 English and 2 German.

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New Method for Performance Analysis (Cont.)

SOV/2186

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New Method for Performance Analysis (Cont.)

SOV/2186

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1. Statement of the problem. Analysis of transients in	

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AVAILABLE: Library of Congress (TK2787 .I2)	
Card 7/7	JP/ec 9-21-59

YANKO-TRINTSKIY, Aleksandr Aleksandrovich, kand. tekhn. nauk, dots.

Determining shock currents and torques in induction motors. Izv. vys. ucheb. zav.; elektromekh. 1 no.3:35-48 '58. (MIRA 11:6)

1. Zaveduyushchiy kafedroy teoreticheskoy elektrotehniki Ural'skogo politekhnicheskogo instituta.  
(Electric motors, Induction)

SOV/144-59-7-3/17

**AUTHOR:** Yanko-Trinititskiy, A.A., Candidate of Technical Sciences, Docent, in charge of the Chair of Theoretical Electro-Technology

**TITLE:** Determination of the Motion of a Synchronous Machine Rotor as a Function of Time from its Image in a Phase Plane

**PERIODICAL:** Izvestiya vysshikh uchebnykh zavedeniy, Elektromekhanika 1959, Nr 7, pp 19-30 (USSR)

**ABSTRACT:** Electro-mechanical processes in a synchronous machine may be represented by differential equations of the phase trajectory in the plane of  $\theta, s$ , where  $\theta$  is the load angle or angle of variation of the alternator and  $s = d\theta/dt$ . The trajectory in the phase plane  $\theta, s$  shows directly the successive values assumed by pairs of variables  $\theta$  and  $s$ , but introduces the time function only indirectly. For fuller consideration of the motion of an alternator rotor it is important to be able to determine the time function of motion from its representation in the phase plane  $\theta, s$ , that is from a given phase trajectory. The two important problems are: to determine the time interval in which a given segment of the trajectory occurs; and to determine the segment of trajectory passed through in a given time interval. The

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SOV/144-59-7-3/17

Determination of the Motion of a Synchronous Machine Rotor as a Function of Time from its Image in a Phase Plane

method of solution of these problems depends on whether the information is presented in the form of Eq (2), or Eq (1) or graphically, as may occur when the trajectory is determined experimentally. A discussion then follows of the properties of phase trajectories that give an idea of the time functions of the processes. For example, if the point moves along a straight line parallel to the axis, then  $\theta$  varies linearly with time; if the point moves obliquely to the  $\theta$  axis then the angle  $\theta$  varies with time according to an exponential law, and so on. Particular cases are considered in Figs 1 and 2. The problem of determining the time interval in which the point passes over a given segment of the phase trajectory is then considered for the cases when the information is in the form of Eqs (1) or (2). The methods of determining the time are in effect determinations by integration of the system over successive intervals. A graphical method is briefly described for use when the data are presented graphically. The converse problem of determining the segment of trajectory traversed during a given time interval is then considered. A Maclaurin

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series is used when the problem is presented analytically; an interpolation method is also briefly described. An example is then considered of the sudden application of load to the shaft of a synchronous motor with constant flux linkage of the secondary winding. The motion of the rotor is given by Eqs (19). Three initial values of  $s$  that are considered are tabulated and it is shown that they correspond respectively to three regimes - the first, unstable; the second, critical; and the third, stable. The method of constructing the phase trajectories is described with reference to Fig 4. A more accurate analytical method of determining  $\sin \theta$  is also given. In addition, a method of calculating time over intervals is demonstrated, the intervals being selected in accordance with Table 1 and the calculation given in Table 2. It is shown that the agreement between the different methods is satisfactory. It is concluded that for most practical calculations it is sufficient to know the angle  $\theta$  and the time  $t$  to the second significant figure. It is then recommended to determine the time by

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calculating the area bounded by the curve of  $1/s$  as a  
function of  $\theta$  at intervals of  $5$  to  $10^\circ$ , excluding  
intervals for which  $s$  is zero. For intervals in which  
 $s$  becomes zero it is recommended to use formula (13) with  
intervals of the order of  $5^\circ$ . A rough graphical method  
of estimating the time is also mentioned.  
There are 5 figures, 2 tables and 5 Soviet references.

ASSOCIATION: Kafedra teoreticheskoy elektrotekhniki, Ural'skiy  
politekhnicheskiy institut (Chair of Theoretical  
Card 4/4 Electro-Technology, Ural Polytechnical Institute)

SUBMITTED: April 25, 1959

YANKO-TRINITSKIY, ALEXANDR NIKOLAYEVICH

S/144/60/000/02/006/019  
E194/E155

AUTHORS: Servy, I.M., Aspirant; and Yanko-Trinitskiy, A.A.,  
Doctor of Technical Sciences, Docent, Head of the Chair.

TITLE: A Practical Method of Checking the Dynamic Stability of  
Synchronous Motors in Drives with Shock Loading

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy,  
Elektromekhanika, 1960, <sup>3</sup>Nr 2, pp 52-60 (USSR)

ABSTRACT: In recent years synchronous motors have come to be widely used, even in drives with shock-loading. For example, synchronous motors without flywheels are used to drive rolling mills in which shock-loading may increase the torque to 3 - 3½ times the r.m.s. value. The motor must take up all these shocks without assistance from a flywheel. The problem of the overload capacity of a synchronous motor, making allowance for its dynamic properties, is essentially a problem of its dynamic stability on shock-loading. This is a very complicated function of time, as typified by Fig 1 which is part of the load diagram of a five-stand sheet mill. The dynamic stability in the case of a single shock load of rectangular wave shape is then considered. The

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A Practical Method of Checking the Dynamic Stability of Synchronous Motors in Drives with Shock Loading

corresponding torque/time diagram is shown in Fig 2a. With this type of loading, the dynamic stability of a synchronous motor may be represented as a graph of the maximum torque against the time for which it is applied. The corresponding formulae are given by expressions (1), (2) and (3). As the shock load comes on, the terminal voltage on the machine may fall, further reducing the dynamic stability. The curve of maximum torque against time can only be used to check the dynamic stability when the load curve of the motor is a series of rectangular shocks of varying magnitudes and durations separated from one another by intervals long enough for the electro-mechanical transient processes set up by the previous shock load to die down. A diagram of this kind is obtained in a single-stand mill when rolling strip in several passes and is illustrated in Fig 3. Load diagrams of non-reversing rolling mills are more complicated and represent a combination of the four types of load curves illustrated in Fig 2. In this case,

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Eq (1) may be used to check the dynamic stability of the motor only after the influence of the nature of the motor load curve on the curve of maximum torque as function of time applied has been allowed for. It is difficult to calculate this coefficient but when it has been done and introduced into Eq (1) it takes the form of expression (4). The load coefficient is best determined experimentally on a model of a synchronous motor for the four main types of loading shown in Fig 2. These various cases are considered and compared, to see which is the most severe. Usually, load curves have one or more torques that exceed the maximum static torque, and others which are smaller than it. Such load curves are not specially severe, even if the interval between shock loadings is less than 1 second. Therefore, for the majority of load curves encountered in practice, the load coefficient may be taken as 0.85 and then expression (4) may be used to check the dynamic stability. This is done by constructing a curve of the additional torque as a function of its time of application, using Eq (4), and checking that the

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A Practical Method of Checking the Dynamic Stability of Synchronous Motors in Drives with Shock Loading

load-curve torques which exceed the maximum static torque of the motor are not greater than the permissible duration of such torques. Expression (4) involves the characteristics of the motor and the flywheel effect of the load, but as such data are seldom available it is desirable to modify the expression. For large machines the magnitudes entering into expression (4) vary over quite narrow limits and by accepting mean values, Eq (8) is obtained. The above recommended method of calculating the dynamic stability of a synchronous motor was checked by tests and calculations. The tests were made on a rig representing a continuous single-stand mill operating with the load curve shown in Fig 3. The r.m.s. power was 9.4 kW, and the motor characteristics are given; its rated output was 15 kVA and its speed 1500 r.p.m. The check on the dynamic stability is illustrated in Fig 4 which indicates that the motor operates stably. For the experimental verification the load curve of Fig 3 was reproduced on a model. An oscillogram of the conditions

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S/144/60/000/02/006/019  
E194/E155

**A Practical Method of Checking the Dynamic Stability of Synchronous Motors in Drives with Shock Loading**

during the first two passes is reproduced in Fig 5 and it is found that the motor operates stably. The proposed method was checked by the calculations on a synchronous motor operating on the load curve shown in Fig 1; the motor characteristics are given. The check on dynamic stability by the proposed method is shown in Fig 6 from which it will be seen that the motor should operate stably. The dynamic stability was also checked by a more accurate method described in another article. The results of the calculations, plotted in Fig 7, disregard the damper winding which would, in fact, improve matters. It will be seen from Fig 7 that even in the worst circumstance the motor operates stably. The checks were made on a synchronous motor type MS-324-12/20<sup>2</sup> at the request of the Verkh-Isetskiy Metallurgical Works, who contemplated replacing a worn-out induction motor by a synchronous motor. It is concluded that the recommended method of checking the dynamic stability of synchronous motors is simple and reliable, and its general use is recommended.

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E194/E155

A Practical Method of Checking the Dynamic Stability of  
Synchronous Motors in Drives with Shock Loading

There are 7 figures and 6 Soviet references.

Card  
6/6

ASSOCIATION: Kafedra teoreticheskoy elektrotekhniki (Chair of  
Theoretical Electro-Technology) (Seryy, I.M.),  
Kafedra teoreticheskikh osnov elektrotekhniki  
(Chair of Theoretical Fundamentals of Electro-  
Technology) (Yanko-Trinitskiy, A.A.), both at  
Ural'skiy politekhnicheskiy institut (Ural  
Polytechnical Institute)

SUBMITTED: December 29, 1959



ZAYTSEV, Ivan Alekseyevich; LUR'YE, Aradiy Gertsevich; YANKO-TRINITSKIY,  
A.A., prof. retsenzent; KUZNETSOV, I.F., red.; SOBOLEVA, Ye.M.,  
tekh. red.

[Textbook on the theoretical principles of electrical engineering]  
Zadachnik po teoreticheskim osnovam elektrotehniki. Izd.2., perer.  
Moskva, Gos.energ.izd-vo, 1961. 301 p. (MIRA 14:12)  
(Electric engineering)

YANKO-TRINITSKIY, A.A., prof., doktor tekhn. nauk

Study of transient electromechanical processes in synchronous  
motors under impact loads. Sbor. nauch. trud. Ural. politekh.  
inst. no.122:209-215 '61. (MIRA 17:12)

SERYI, IGOR' mikhaylovich, assistant; YUSHMANOV, YURIY IVANOVICH,  
kand.tekhn.nauk; YANKO-TRINITSKIY, ALEKSANDR ALEKSANDROVICH,  
doktor tekhn.nauk, prof.

Effect of damping moments on the dynamic stability of a synchronous  
motor. Izv. vys. ucheb. zav.; elektromekh. 4 no.7:16-25 '61.  
(MIRA 14:7)

1. Kafedra teoreticheskoy elektrotekhniki Ural'skogo  
politekhnicheskogo instituta (for Seryy). 2. Nachal'nik  
vychislitel'nogo tsentra Ural'skogo politekhnicheskogo instituta  
(for Yushmanov). 3. Zaveduyushchiy kafedroy teoreticheskoy  
elektrotekhniki Ural'skogo politekhnicheskogo instituta (for  
Yanko-Trinitskiy).

(Electric motors, Synchronous)

YANKO-TRINITSKIY, A.A., doktor tekhn.nauk, prof.; ABRAMOVICH, G.P., inzh. (Gomel'); NEDELKU, V., kand.tekhn.nauk, dotsent; KARPOV, G.V.; VERETENNIKOV, L.P., kand.tekhn.nauk, dotsent (Leningrad); VILESOV, D.V., kand.tekhn.nauk, dotsent (Leningrad); ALYAB'YEV, M.I., doktor tekhn.nauk, prof. (Leningrad)

Equations and fundamental relationships in the theory of synchronous machines. Elektrichestvo no.7:81-85 J1 '62. (MIRA 15:7)

1. Ural'skiy politekhnicheskiy institut imeni Kirova (for Yanko-Trinit'skiy).
2. Bukharestskiy politekhnicheskiy institut, Rumyniya (for Nedelku).
3. Institut elektromekhaniki (for Karpov).  
(Electric machinery, Synchronous)

SERYI, Igor' Mikhaylovich, assistant; YANKO-TRINITSKIY, Aleksandr Aleksandrovich, doktor tekhn. nauk, prof.

Features of using simplified equations in the calculation of electro-mechanical transient processes of a synchronous electric motor. Izv. vys. ucheb. zav.; elektromekh. 5 no.11: 1225-1232 '62. (MIRA 16:1)

1. Kafedra teoreticheskoy elektrotekhniki Ural'skogo politekhnicheskogo instituta (for Seryy). 2. Zavednyushchiy kafedroy teoreticheskoy elektrotekhniki Ural'skogo politekhnicheskogo instituta (for Yanko-Trinitskiy).

(Electric motors, Synchronous)

BAZHANOVA, V.A.; ZBOROVSKIY, I.A.; LOPATO, B.A.; MARAKTANOV, V.A.;  
TARASOV, V.B.; YANKO-TRINITSKIY, A.A.

[Textbook on a course in "Theoretical principles of  
electrical engineering"] Zadachnik po kursu "Teoreticheskie  
osnovy elektrotehniki." Sverdlovsk. Nos. 1, 3-4. 1963.  
(MIRA 17:9)

1. Sverdlovsk. Ural'skiy politekhnicheskii institut.

TORBENKOV, G.M.; SKURIDIN, V.P.; YANKO-TRINITSKIY, A.A.

Device for taking oscillograms of the working angle of a slow-running synchronous motor during the presence of transients.  
Elektrichestvo no.4:89-90 Ap '63.

(MIRA 16:5)

1. Ural'skiy politekhnicheskii institut.

(Transients (Electricity))  
(Electric machinery, Synchronous)

YANKO-TRINITSKIY, <sup>A.A.</sup> doktor tekhn. nauk, prof.

Some aspects of outlining a course in theoretical principles  
of electrical engineering. Elektrichestvo no.1:84 Ja '64.  
(MIRA 17:6)

1. Ural'skiy politekhnicheskiy institut.



TORBENKOV, Gennadiy Moiseyevich, aspirant; SKURIDIN, Vladimir Petrovich, känd.tekhn.nauk, dotsent; YANKO-TRINITSKIY, Aleksandr Aleksandrovich, doktor tekhn.nauk, prof.

Oscillographic recording of the working angle of a noiseless synchronous motor during electromechanical transients. Izv.vys.ucheb. zav.; elektromekh. 7 no.1:111-116 '64. (MIRA 17:9)

1. Kafedra teoreticheskikh osnov elektrotekhniki Ural'skogo politekhnicheskogo instituta (for Torbenkov).
2. Kafedra avtomatiki i telemekhaniki Ural'skogo politekhnicheskogo instituta (for Skuridin).
3. Zaveduyushchiy kafedroy teoreticheskikh osnov elektrotekhniki Ural'skogo politekhnicheskogo instituta (for Yanko-Trinitskiy).

PARAMONOVA, Yelena Ivanova, assistentka; YANKO-TRINITSKIY, Aleksandr Aleksandro-  
yich, doktor tekhn. nauk, prof.

Reduction of external characteristics to asymmetrical form. Izv. vys.  
ucheb. zav.; elektromekh. 8 no.5:582-585 '65. (MIRA 18:7)

1. Kafedra teoreticheskoy elektrotehniki Ural'skogo politekhnicheskogo  
instituta (for Paramonova). 2. Zaveduyushchiy kafedroy teoreticheskoy  
elektrotehniki Ural'skogo politekhnicheskogo instituta (for Yanko-  
Trinitskiy.

TORHENKOV, Gennadiy Moiseyevich, aspirant; SKURIDIN, Vladimir Petrovich, kand. tekhn.nauk, dotsent; YANKO-TRINITSKIY, Aleksandr Aleksandrovich, doktor tekhn.nauk, prof.

Analysis of some sources of error in electronic impulse-type phase meters, Izv.vys.ucheb.zav.; elektromekh. 8 no.9:1049-1055 '65. (MIRA 18:10)

1. Kafedra teoreticheskikh osnov elektrotehniki Ural'skogo politekhnicheskogo instituta (for Torbenkov). 2. Kafedra avtomatiki i telomekhaniki Ural'skogo politekhnicheskogo instituta (for Skuridin). 3. Zaveduyushchiy kafedroy teoreticheskikh osnov elektrotehniki Ural'skogo politekhnicheskogo instituta (for Yanko-Trinitskiy).

YANKOP, E.K.

"Electromagnetic pumps for Liquid Metals," from the book-(Applied Magnetohydrodynamics), Works of the Institute of Physics, Vol 8, edited by I. A. Tyutin, Candidate of Technical Sciences; I. M. Kirko, Candidate of Physicomathematical Sciences; V. G. Vitol, Candidate of Physicomathematical Sciences; and S. A. Varchenya; Riga, Publishing House of the Academy of Sciences Latvian SSR; 1956, 132 pp

Sum in 1467

124-58-9-10043

Translation from: Referativnyy zhurnal, Mekhanika, 1958, Nr 9, p 85 (USSR)

AUTHOR: Yankop, E. K.

TITLE: Flow-velocity Distribution and Magnetohydrodynamic Pressure Losses in the Throat of a Coaxial Induction Pump (Raspredele-niye skorosti potoka i magnitogidrodinamicheskiye poteri davle-niya v gorlovine koaksial'nogo induktsionnogo nasosa)

PERIODICAL: Zinatn. raksti. Latv. univ., Uch. zap. Latv. un-t, 1957, Vol 10, pp 15-20

ABSTRACT: Analytical determination of the velocity profile in the throat of an electromagnetic pump which serves for the pumping of molten metal in terms of the wall curvature of the pump throat and the parameters of the liquid subjected to pumping. Graphs are provided for the velocity profiles and the relative pressure losses.

1. Electromagnetic pumps--Performance Yu. G. Zakharov
2. Liquid metals--Velocity 3. Mathematics--Applications

Card 1/1

YAN KOP, E. K.

Experimental investigation of the interaction of a magnetic field with a liquid metal. (Abstract of article, "Model of an Inductively Heated Channel with Liquid Metal. Located in a Twisted Magnetic Field." by I. N. Kirko, Yu. Ya. Givida, S. A. Yelina /abstract/, and L. Ya. Ustovskaya, Riga, already published in INTEGRAL Vol. 1, No. 1, 1978, p. 20.) is supplemented by a discussion of the article by I. N. Kirko, Riga, pp. 218-220.)

Experimental investigation of the interaction of a magnetic field with a liquid metal. (Abstract of article, "Model of an Inductively Heated Channel with Liquid Metal. Located in a Twisted Magnetic Field." by I. N. Kirko, Yu. Ya. Givida, S. A. Yelina /abstract/, and L. Ya. Ustovskaya, Riga, already published in INTEGRAL Vol. 1, No. 1, 1978, p. 20.) is supplemented by a discussion of the article by I. N. Kirko, Riga, pp. 218-220.)

Experimental investigation of the interaction of a magnetic field with a liquid metal. (Abstract of article, "Model of an Inductively Heated Channel with Liquid Metal. Located in a Twisted Magnetic Field." by I. N. Kirko, Yu. Ya. Givida, S. A. Yelina /abstract/, and L. Ya. Ustovskaya, Riga, already published in INTEGRAL Vol. 1, No. 1, 1978, p. 20.) is supplemented by a discussion of the article by I. N. Kirko, Riga, pp. 218-220.)

Experimental investigation of the interaction of a magnetic field with a liquid metal. (Abstract of article, "Model of an Inductively Heated Channel with Liquid Metal. Located in a Twisted Magnetic Field." by I. N. Kirko, Yu. Ya. Givida, S. A. Yelina /abstract/, and L. Ya. Ustovskaya, Riga, already published in INTEGRAL Vol. 1, No. 1, 1978, p. 20.) is supplemented by a discussion of the article by I. N. Kirko, Riga, pp. 218-220.)

Experimental investigation of the interaction of a magnetic field with a liquid metal. (Abstract of article, "Model of an Inductively Heated Channel with Liquid Metal. Located in a Twisted Magnetic Field." by I. N. Kirko, Yu. Ya. Givida, S. A. Yelina /abstract/, and L. Ya. Ustovskaya, Riga, already published in INTEGRAL Vol. 1, No. 1, 1978, p. 20.) is supplemented by a discussion of the article by I. N. Kirko, Riga, pp. 218-220.)

Experimental investigation of the interaction of a magnetic field with a liquid metal. (Abstract of article, "Model of an Inductively Heated Channel with Liquid Metal. Located in a Twisted Magnetic Field." by I. N. Kirko, Yu. Ya. Givida, S. A. Yelina /abstract/, and L. Ya. Ustovskaya, Riga, already published in INTEGRAL Vol. 1, No. 1, 1978, p. 20.) is supplemented by a discussion of the article by I. N. Kirko, Riga, pp. 218-220.)

Experimental investigation of the interaction of a magnetic field with a liquid metal. (Abstract of article, "Model of an Inductively Heated Channel with Liquid Metal. Located in a Twisted Magnetic Field." by I. N. Kirko, Yu. Ya. Givida, S. A. Yelina /abstract/, and L. Ya. Ustovskaya, Riga, already published in INTEGRAL Vol. 1, No. 1, 1978, p. 20.) is supplemented by a discussion of the article by I. N. Kirko, Riga, pp. 218-220.)

Experimental investigation of the interaction of a magnetic field with a liquid metal. (Abstract of article, "Model of an Inductively Heated Channel with Liquid Metal. Located in a Twisted Magnetic Field." by I. N. Kirko, Yu. Ya. Givida, S. A. Yelina /abstract/, and L. Ya. Ustovskaya, Riga, already published in INTEGRAL Vol. 1, No. 1, 1978, p. 20.) is supplemented by a discussion of the article by I. N. Kirko, Riga, pp. 218-220.)

Experimental investigation of the interaction of a magnetic field with a liquid metal. (Abstract of article, "Model of an Inductively Heated Channel with Liquid Metal. Located in a Twisted Magnetic Field." by I. N. Kirko, Yu. Ya. Givida, S. A. Yelina /abstract/, and L. Ya. Ustovskaya, Riga, already published in INTEGRAL Vol. 1, No. 1, 1978, p. 20.) is supplemented by a discussion of the article by I. N. Kirko, Riga, pp. 218-220.)

YANKOP, E.K., Cand Tech Sci -- (diss) "Electromagnetic and  
magnetohydrodynamic processes in <sup>AC</sup> electromagnetic pumps," ~~of alter-~~  
~~ating current.~~ " Riga, 1959. 19 pp (Min of Higher Education  
USSR. Mos Order of Lenin Power <sup>Engineering</sup> Inst). 150 copies (KL, 39-59, 105)

62

L 18828-63 BDS/EWT(1)/EEC(b)-2 AFFTC/ASD/ESD-3/IJP(C)  
ACCESSION NR: AR3005042 S/0196/63/000/005/0009/0009

59

SOURCE: RZh. Elektrotehnika i energetika, Abs. 5 A52

AUTHOR: Elge, I. Yu.; Yankop, E. K.

TITLE: Analytical computation of electromagnetic fields in cylindrical induction pumps

CITED SOURCE: Uch. zap. Rizhsk. politekhn. in-t, v. 7, 1962, 127-143

TOPIC TAGS: electromagnetic field, induction pump, Bessel function

TRANSLATION: The pump is assumed to be of infinite length. All particles of the forced fluid are considered to be moving along the channel at the same velocity, equal to the average velocity of fluid flow. The resultant running magnetic field has radial and tangential components varying along the pump axis according to the running wave law with a phase factor of  $\alpha = \frac{\pi}{\tau}$  (where  $\tau$  is the polar separation).

The  $\mu$  of the ferromagnetic core and inductor steel is taken as infinite and for all pump channel zones to be the same and equal to  $\mu_0$ . The solution of the differential equation for the vector potential magnetic field was obtained in 1st. and

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L 18828-63

ACCESSION NR: AR3005042

2nd class, 1st order Bessel functions. The determination of constants required cumbersome computations. A numerical example is provided. One illustration. Bibliography with eight titles. V. Govorkov.

DATE ACQ: 10Jul63

SUB CODE: MM

ENCL: 00

Card 2/2

YANKOUSKI, I.D.

[Intensive fattening of young cattle] Intensyuny adkorm  
maladniaku buinai rahatai zhyvioly. Minsk, Dziarzhaunae  
vyd-va sel'skhaspadarchai lit-ry BSSR, 1962, 32 p.  
(MIRA 16:8)

(Beef cattle--Feeding and feeds)

AT. YANKOV  
BULGARIA / Chemical Technology, Chemical Products and Their Application. Part 3 - Fermentation Industry. H-26

Abs Jour : Ref. Zhur. Khimiya, No 4, 1958, 12773.

Author : Tr. Ivanov, St. Gerov, At. Yankov.

Inst : College Institute of Food and Condiment Industry.

Title : Study of Champagnization Possibility of Wine Materials of Red Muscatel, Proslava and Mavrud Grapes.

Orig Pub : Nauchn. Tr. Vissh. in-t khranit. i vkus. prom-st. Plovdiv, 1956, 3, 293 - 314.

Abstract : Wine materials of Red Muscatel (RM), Proslava (P) and Mavrud (M) grapes were champagnized in bottles. M produces champagne wine of the highest quality and P follows it. RM wine material one year old blended with older wine material of P and M sorts improves their champagne qualities.

Card 1/2

BULGARIA / Chemical Technology, Chemical Products and Their  
Application. Part 3 - Fermentation Industry.

H-26

Abs Jour : Ref. Zhur. Khimiya, No 4, 1958, 12773.

Abstract : The sorts RM and P are the most suitable for manufacturing  
Bulgarian champagne by using them alone, or blended with M.

Card 2/2

~~ST.~~ YANKOV [AT.]

H-27

BULGARIA / Chemical Technology, Chemical Products and Their Application. Part 3 - Food Industry.

Abs Jour : Ref: Zhur. Khimiya, No 4, 1958, 12866.

Author : St. Yankov.

Inst : College Institute of Food and Condiment Industry, Plovdiv.

Title : Water and Sugar Diffusion in Stewed Kyustendil Blue Plums.

Orig Pub : Nauchn. tr. Vissh. in-t khranit. i vkus. prom-st. Plovdiv, 1956, 3, 325 - 332.

Abstract : The stewed fruit lose much weight at sterilization, but their weight increases somewhat during the following storage, though in does not attain the original magnitude. After 15.5 months of storage, the weight of whole fruit is 12% less than the original, and the weight of halves is 10% less. The weight of syrup in stewed whole fruit increases by 21.3%

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BULGARIA / Chemical Technology, Chemical Products and Their  
Application. Part 3 - Food Industry.

H-27

Abs Jour : Ref. Zhur. Khimiya, No 4, 1958, 12866.

Abstract : and that in stewed halves increases by 17.5%. The practical  
equalization of sugar concentrations in fruit and syrup takes  
place 20 days after sterilization, but the absolute equali-  
zation is not attained even after 15.5 month storage.

Card 2/2

YANKOV, ATANAS TOD

Bulgaria/Chemical Technology. Chemical Products and Their Application -- Fermentation industry, I-27

Abst Journal: Referat Zhur - Khimiya, No 2, 1957, 6525

Author: Yankov, Atanas Tod

Institution: None

Title: Method for Determining Bottling Maturity of Wine

Original Publication: Lozarstvo i vinarstvo, 1956, 5, No 1, 42-45

Abstract: Experiments conducted on determination of the bottling stability of table wines of Dimyat variety, of 1954 vintage, and strong liqueur wines of Dimyat and Mavrud varieties, vintage of 1953/54, have fully confirmed the correctness and reliability of the method in combination with microscopic examination of wine permits to reach a conclusion concerning the physicochemical and biological stability of wine.

Card 1/1

BULGARIA/Chemical Technology - Chemical Products and Their Application - Fermentation Industry. H.

Abs Jour : Ref Zhur - Khimiya, No 9, 1958, 30438

Author : Yankov, A.T.

Inst : -

Title : Rational Formulas for Calculating the Amounts of Concentrate and of Alcohol to be Used in the Production of Dessert Wines.

Orig Pub : Lozarstvo i Vinarstvo, 6, No 4, 29-34, 1957.

Abstract : A modified 'star' formula is proposed for the determination of the amount of vacuum-distilled must to be used in the sweetening of dessert wines:  $K \cdot M(B-A)/C-B$ , where K is the quantity of vacuum-distilled must (in kg) to be used, M is the capacity of the vessel, B is the desired sugar content, and A is the initial sugar content. The following formula is proposed for the calculation of the amount of alcohol to be used in the fortification

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BULGARIA/Chemical Technology- Chemical Products and Their  
Application - Fermentation Industry.

H.

Abs Jour : Ref Zhur - Khimiya, No 9, 1958, 304C3

step:  $K = \frac{M}{18.5 - (0.6/B - P)} / C - 18.5$ , where K is the amount of alcohol in liters to be used in the fortification, M is the total volume of alcohol and vacuum-distilled must, B is the sugar content of the finished wine, P is the sugar content in % at which fortification is completed, 18.5 is the desired alcohol content  $\sqrt{TN}$ : presumably by vol of the wine, and C is the strength of the alcohol.  $\sqrt{TN}$ : In the preceding formula C refers to the sugar content of the vacuum-distilled must. For the conversion from liters to kgs of alcohol the factor is 0.815; for the inverse conversion, the factor is 1.227.

Card 2/2

YANKOV, I. I.

BULGARIA/Chemical Technology - Chemical Products and Their  
Application - Fermentation Industry.

H.

Abs Jour : Ref Zhur - Khimiya, No 9, 1958, 30490

Author : Ivanov, T. and Yankov, A. I.

Inst : -

Title : The Technology of Mavrud Type Dessert Wines.

Orig Pub : Lozarstvo i Vinarstvo, 6, No 5, 20-24, 1957.

Abstract : For the complete extraction of coloring substances the heating of the pomace to 60° and fermentation over the pomace until fortification are recommended in the production of dessert and fortified wines. The above practices are claimed to result in marked improvements of the quality of the wines.

Card 1/1

YANKOV, A.

Country : BULGARIA H-27  
Category : Chemical Technology. Fermentation Industry  
Abs. Jour : Ref Zhur-Khimiya, No 14, 1959, No 51411  
Author : Ivanov, T.; Gerov, S.; Yankov, A.  
Institute : -  
Title : Taking Samples from Champagne Bottles  
Orig Pub. : Lozarstvo i vinarstvo, 1958, 7, No 5, 36-38  
Abstract : A pipette for the removal of samples from champagne bottles that causes disturbance of gas equilibrium, is a small graduated plunger type barrel pump having metal tube soldered to its lower portion. The latter is connected with a rubber tubing with an aphrometer, whose needle is introduced into a bottle. The proposed method of sample taking is applicable in the determination of the total and of chemically-bound CO<sub>2</sub> in champagnes. -- I. Skurikhin  
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Military Medicine

BULGARIA

YANKOV, B., DONCHEV, D., Colonels of the Medical Service

"Extent of Therapeutic Aid at Stages of Medical Evacuation"

Sofia, Voenno Meditsinsko Delo, Vol 21, No 3, Jun 66, pp 3-9

Abstract: Therapy of injuries resulting from the use of nuclear weapons and chemical warfare agents (radiation sickness, effects of poisoning with radioactive substances, and effects produced by nerve poisons and poisons resorbed through the skin) is discussed in some detail. In connection with the therapeutic measures to be taken, conditions existing in wartime at various stages of evacuation of the injured are considered. Treatment of radiation sickness by the administration of cardiac stimulants, transfusion of blood and blood substitutes, and administration of atropine and chlorazine (if indicated) is recommended. The therapy of effects produced by nerve poisons, as outlined by the authors, should comprise administration of atropine and of ganglion-blocking agents such as largactyl (chlorazine), which is referred to as particularly suitable, to

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