

VINTER, A.V.; ~~MEKRASOV, A.M.~~ SYROMYATNIKOV, I.A.; VOZNESENSKIY, A.N.;
VASILENKO, P.I.; LAUPMAN, P.P.; TERMAN, I.A.; VINOGRADOV, N.P.;
ANTOSHIN, N.N.; ALEKSANDROV, B.K.; USPENSKIY, B.S.; KLASSON, I.E.;
KHEYPITS, M.E.; DRUTSKIY, V.P.; KRACHKOVSKIY, N.E.; POPOV, P.A.;
CHELIDZE, I.M.; FILARETOV, S.N.; KOZLOV, M.D.; BERLIN, V.Ya.;
SARADZHEV, A.Kh.; GORDZIYEVICH, I.S.; PAK, V.P.; DORFMAN, S.M.;
DUBINSKIY, L.A.; UL'YANOV, S.A.; GRUDINSKIY, P.G.; KUVSHINSKIY, N.N.;
ERMOLANKO, V.M.

Mikhail Mikhailovich Karpov. Elek.sta. 27 no.10:62 O '56. (MLRA 9:12)
(Karpov, Mikhail Mikhailovich, d.1956)

А.А.А.А.
CHIZHOV, D.G.; KOOTEV, G.I.; LAVRENIENKO, K.D.; SPIRIN, S.A.; NEKRASOV, A.M.;
IVANOV, M.I.; UPAYEV, M.Ya.; GRISHIN, I.K.; KOSTIN, M.P.; POPOV, V.A.;
ZAGORODNIKOV, P.I.; FEDOTOV, P.N.; KAZ'MIN, A.V.; POMICHEV, G.I.;
YERSHOV, P.I.; MESHCHERYAKOV, V.I.; YEFREMOV, S.G.; LEVIN, I.S.;
LETUCHEV, L.I.; BELKIN, M.N.; OBOLONKOV, M.I.; BATENIN, B.A.;
BUR'YANOV, B.P.; KANATOV, P.I.; KOKOREV, S.V.

Nikolai Alekseevich Andreev. Elek. sta. 27 no.10:62 0 '56.
(Andreev, Nikolai Alekseevich, 1897-1956) (MLRA 9:1?)

105-9-1/32

AUTHORS Nekrasov A.M., Engineer, Groys Ye.S., Engineer, Zelikin M.L.,
Engineer, Turetskiy V.Ye., Engineer, Man'kin E.A., Candidate of
Technical Sciences.

TITLE The Transmission System Stalingrad Hydro-Electric Station-Donbass.
(Elektroperedacha postoyannogo toka Stalingradskaya GES-Donbass -
- Russian)

PERIODICAL Elektrichestvo, 1957. Nr 9, pp 1 - 10 (U.S.S.R.)

ABSTRACT The line still under construction will connect the Southern energy
system with the Stalingrad hydro-electric station. In the case of
a flood the energy will be transferred from Stalingrad to the Don-
bass and during seasonal fluctuations on the Wolga it will be ar-
ranged the reverse direction. The nominally fixed power is 750 MW.
Four billion kw will be transferred in both directions yearly. The
length of line is 470 km, the voltage is 800 kV. The operation- and
experimental results of the d.c. line Kashira-Moscow were of great
importance for projecting. The design and operation of the power
line is given. It is an eight-bridge scheme with earthing of the
center of the d.c. part. The average rectified voltage of each brid-
ge is 100 kV. Single-phase transformers of 82 MVA were selected for
this purpose. A net-speed-control is planned as well as shunt-val-
ves for the liquidation of operational breakdowns. The change of
direction of the energy transmission is arranged by means of a net-
control and without any switching in the main system. The descrip-
tion of the insulation as well as of the overvoltage protection, the

Card 1/2

105-9-1/32

The Transmission System Stalingrad- Hydro-Electric Station
-Donbass.

basic equipment of the transformer substations, their arrangement and the power line itself, which is constructed as open-air transmission-line, is given. Finally the technical economic indices as well as a comparison with an alternating line are given. The d.c. line is cheaper by almost 50% and has losses which are 2,5 times lower. The Stalingrad-Donbass line costs 0,9 Kop. per 1 kWh. The technical economic indices are practically the same in both cases. There are 4 tables, 10 illustrations and 9 Slavic references.

ASSOCIATION Technical Direction of MES.-Scientific Research Institute for Direct-Current.- Moscow Transformer Factory.
(Tekhnicheskoye upravleniye MES.- Nauchnoissledovatel'skiy institut postoyannogo toka.- Teploelektroproyekt.-Moskovskiy transformatornyy zavod.)

SUBMITTED January 18, 1957
AVAILABLE Library of Congress.
Card 2/2

NEKRASOV, A.M.

Technical data on Soviet newly designed and planned superparameter steam turbines and auxiliaries are given in the article, "Certain Summaries of Technological Progress in Power Engineering," by A. M. Nekrasov, chief, Engineering Administration, Ministry of Electric Power Stations USSR.

The three cylinder steam turbine FVK-200 is designed to generate 200,000 kw at steam pressure of 130 atm, temperature of 565°C and back pressure of 0.035 atm. The three cylinder steam turbine SVK-200 is designed to generate 200,000 kw at steam pressure of 220 atm, steam temperature of 600°C and back pressure of 0.03 atm.

Preliminary work has been done toward the construction of a special stand for testing the disconnecting switches, commutation devices and transformers for their thermal and dynamic stability. This stand will have provisions to test switches and equipment for voltages from 6 to 400 kv at various operating conditions, using test current power lines or surge generators. Powerful short circuiting up to 12 million kv can be obtained with the aid of surge generators, and up to 25 million kv with the aid of synthetic networks.

54M.1345

NEKRASOV, A. M.

Research and investigation carried out by the Power Engineering Institute, Academy of Sciences USSR, the All-Union Planning Trust for Steam-Electric Power Stations, Substations, and Furnaces, the All-Union Electrical Engineering Institute and the Scientific Research Institute of Direct Current have led to adaption of 660 kv as a next step in increasing the voltage on long-distance ac power lines. Experimental models of current transformers and disconnecting switches have been built for this voltage and are now in process of testing.

The design of a building to house transmission equipment for 800 kv dc electric power from the Stalingrad Hydroelectric Power Station to Donbass has been completed. (Elektricheskiye Stantsii, No 1, Jan 57, pp 6-10) (U)

54M-1345

NIKRASOV, A.M., inzh.

Forty years of Soviet power engineering. Elek.sta. 28 no.11:11-20
N 157. (MIA: 10:11)

(Power engineering)

NEKRASOV, A. M.

"Work done in the Soviet Union on High-Voltage Long-Distance A.C. Power Transmission"

paper read (by a substitute) at the Intl. Power Conference, (Aluminum Div., AIEE-ASME National Power Conference,) Boston, Mass., 29-Sep - 4 Oct 1958.

NEKRASOV, A.M., red.; HOKOTYAN, S.S., red.; BRANDENBURGSKAYA, E.Ya., red.;
VORONIN, K.P., tekhn.red.

[Volga Hydroelectric Power Station - Moscow long-distance
transmission line] Dal'niaia elektroperedacha Volzhskaya GES
imeni V.I.Lenina - Moskva; sbornik statei. Moskva, Gos.energ.
izd-vo, 1959. 487 p. (MIRA 11:12)
(Electric lines--overhead)

SOV/112-59-1-8

Translation from: Referativnyy zhurnal. Elektrotehnika, 1959, Nr 1, p 1 (USSR)

AUTHOR: Nekrasov, A. M., Loshak, B. O., and Steklov, V. Yu.

TITLE: Forty Years of Soviet Electric Power Engineering

PERIODICAL: V sb.: Energ. str-vo SSSR za 40 let. M.-L., Gosenergoizdat,
1958, pp 7-33

ABSTRACT: Bibliographic entry.

Card 1/1

NEKROLOG A 01

AUTHOR: ROBERTS, K. F., Capt. USAF.

16-1-1966

TITLE: A Scientific-Technical Conference on Skills Development for Labor of the USSR. (The so-called "Kosygin Plan" for the development of the USSR's scientific-technical labor force.)

PERIODICAL: International Labour Review, N.4, 1966, U.S.S.R.

ABSTRACT: The conference on the development of skills and training of labor force in the USSR was held in Moscow from 1965 to 1966. It was convened by the Ministry of Labor of the USSR and the Ministry of Education of the USSR. The conference was attended by representatives of the USSR and other countries. The conference discussed the development of skills and training of labor force in the USSR and the role of the state in this process. The conference also discussed the development of skills and training of labor force in other countries. The conference concluded with the adoption of a plan for the development of skills and training of labor force in the USSR.

Card 1/4

1974-10/24

A Scientific-Technical Conference on Automation of Power Station Boilers

organizational minutes reports on...
The Chief of the Technical Directorate of the Ministry
of Power Stations A. M. Zhukov, the Vice-Chief of
the Scientific Directorate of the Ministry of Power
Stations, the report of the Scientific-Technical
Conference on Automation of Power Station Boilers
and its organizational minutes...
Card. Tech. Dir. M. F. R. [Name]...
of [Name]... review... of
the [Name] of boiler-house...
its efficiency...
[Name]...
[Name]...
Vengov...
equipment...
There were reports... of fuel-
[Name]...
described new types of equipment...
[Name]...
[Name]... equipment for large...
Card 2/4 [Name] I. I. Spill... [Name]...

962110/24

A Scientific-Technical Conference on Auxiliary Engines for
Power Station Engines.

fuel-injection systems - new developments. Reports of Chief Engineer L. L. Kiselev of the I. I. Keldysh, Engineers Ye. G. Lopyrev, I. A. Dianov, K. I. ... and Chief Engineer V. V. ...

Chief Engineer V. V. Rykova and Chief Engineer I. A. ...

Chief Engineer V. B. ... reported foreign ...

The last group of reports dealt with fitting ...

operating ... The report of ...

Chief Engineer I. I. ... and Chief Engineer A. V. ...

reliability ... Reports on removal of ...

Card 3/4 The discussion of the reports showed that the ...

1-1-70
A Scientific-Technical Conference on Availability of Power for
Power Station Boiler-Houses.

Work is still not being given sufficient attention to
improve equipment. Lack of attention to the condition of
station's boilers defects that the Conference has
formally noted. According to the results of the
equipment and number of defects. Mentioned
Mentioned the level of the condition of
equipment in the boiler-houses. It is
considered that the results of the Conference
representative of the Conference.

AVAILABILITY: Library of Congress.

Card 4/4

11-11-58

AUTHORS: Krzhizhanovskiy, G. M. Veyts, V. I., Baum, V. A., Gorushkin, V. I., Nekrasov, A. M., Markovich, I. M., Tolstov, Yu. G. '05-58-4-34/37

TITLE: V. I. Popkov, Corresponding Member of the AS USSR (Chlen-korr. AN SSSR V. I. Popkov)

PERIODICAL: Elektrichestvo, 1958, Nr 4, pp. 94-94 (USSR)

ABSTRACT: On the occasion of his 50th birthday and his 25th anniversary of scientific activity. Valeriy Ivanovich Popkov was born in February 1908. His activity as engineer started in the Dzerzhinskiy works in 1930. In 1932 he worked at the All Union Institute for Electrical Engineering and began with the elaboration of lightning protective plants for energy systems. His main activity was devoted to the problem of corona discharge. In 1934 he began a great work at the ENIN of the AS USSR concerning the investigation of d. c. corona. In the course of this he elaborated the theory of dipolar corona and experimentally

Card 1/2

V. I. Popkov, Corresponding Member of the AS USSR

105-59-4-34/37

determined a number of important physical parameters in this field. In 1948 he became Dr. of Technical Sciences and Director of the Group for the Investigation of Corona Discharge at the Institute for Power Engineering of the AS USSR. Under his direct charge the research works on the corona are coordinated in the various institutes of the Union. He wrote 10 scientific works. In 1953 he became Corresponding member of the AS USSR. Since 1953 he has been First Vice Director of the Institute for Power Engineering imeni G. M. Krzhizhanovskiy of the AS USSR and President of the Department for Electrical Power Engineering of the Scientific Council (Ucheny sovet). There are 1 figure.

AVAILABLE. Library of Congress

1. Biography

Card 2/2

3(6)

PHASE I BOOK EXPLOITATION

SOV/1996

Nekrasov, Andrey Mikhaylovich

Razvitiye energetiki SSSR v 1959-1965 godakh (Development of Electric Power in the USSR from 1959 to 1965) Moscow, Izd-vo "Znaniye," 1959. 31 p. (Series: Vsesoyuznoye obshchestvo po rasprostraneniyu politicheskikh i nauchnykh znaniy. Seriya IV, 1959, vyp. 8) 45,500 copies printed.

Sponsoring Agency: Vsesoyuznoye obshchestvo po rasprostraneniyu politicheskikh i nauchnykh znaniy.

Scientific Ed.: V. Yu. Steklov; Ed.: T.F. Islankina; Tech. Ed.: L.Ye. Atroshchenko

PURPOSE: This booklet is intended for the general reader.

COVERAGE: The author surveys the stages of development of electrification in the USSR, describes the present state of the electric power balance and discusses electric power planning for the 7-year period 1959-1965. No personalities are mentioned. There are no references.

Card 1/3

Development of Electric Power (Cont.)

SOV/1996

TABLE OF CONTENTS:

Development of the National Economy and the Electric Power Balance of the USSR	4
The Present State and Development of Electric Power (General Statistical Data)	6
Fuel Balance and Utilization of Power Sources	8
Steam-turbine Power Stations	11
Thermification	18
Hydroelectric Power	20
Atomic Electric - power Stations	22
Interconnected Systems and Electric-power Networks	23

Card 2/3

Development of Electric Power (Cont.)

SOV/1996

Capital Investments in Electric Power and Building of Electric Power
Stations and Networks

29

AVAILABLE: Library of congress

Card 3/3

JP/gap
9-31-59

NOVIKOV, I.T.; PAVLENKO, A.S.; SMIRNOV, M.S.; CHIZHOV, D.G.; LAVREHENKO,
K.D.; NEKRASOV, A.M.; NOSOV, R.P.; TARASOV, N.Ya.; ZHIMMERIN, D.G.
UGOLETS, I.I.; DMITRIYEV, I.I.; DROBYSHEV, A.I.; YERMAKOV, V.S.;
SAPOZHNIKOV, F.V.; BOROVY, A.A.; BANNIK, V.P.; DASKOVSKIY, Ya.M.;
BOGOVIN, N.A.; PETROV, A.H.; MEL'NIKOV, B.V.; LATYSH, D.I.;
KONIN, F.P.; DYDYKIN, P.Ye.; BONDAREV, I.I.; GUMBYUK, D.L.;
POHOGAYLO, K.M.

Ol'ga Sergeevna Kalashnikova; obituary. Elek. sta. 30 no.2:95
F '59. (MIRA 12:3)
(Kalashnikova, Ol'ga Sergeevna, 1914)

ARAKCHNYEV, A.A.; BEREZIN, S.P.; BELYAVSKIY, V.A.; KOLOTILOV, A.N.;
MOLOKANOV, S.I.; NEKRASOV, A.M.; LAVRENEKO, K.D.; POLENTSEV, M.K.;
ROZHDISTVENSKIY, A.P.; SATANOVSKIY, A.Ye.; SIRYY, P.O.; SPIRIDONOV,
K.A.; CHERNYSHOV, P.S.; SHUBENKO-SHUBIN, L.A.

Savva Mikhailovich Zherbin; obituary. Elek, sta. 30 no.2:96 F
'59. (MIRA 12:3)

(Zherbin, Savva Mikhailovich, 1903-1958)

ZASYAD'KO, A.F.; KUCHERENKO, V.A.; PAVLENKO, A.S.; GRISHMANOV, I.A.;
FROLOV, V.S.; SHASHKOV, Z.A.; YEPREMOV, M.T.; SMIRENOV, M.S.;
CHIZHOV, D.G.; NOVIKOV, I.T.; NOSOV, R.P.; ASKOCHENSKIY, A.E.;
SHEKASOV, A.M.; LAVREHENKO, K.D.; TARASOV, N.Ya.; GABDANK, K.A.;
LEVIN, I.A.; GINZBURG, S.Z.; ALEKSANDROV, A.P.; KOWZIN, I.V.;
OBEROV, I.N.; SOSNIN, L.A.; BELYANOV, A.A.; NAYMUSHIN, I.I.;
INYUSHIN, M.V.; ACHKASOV, D.I.; RUSO, G.A.; DROBYSHEV, A.I.;
PLATONOV, N.A.; ZHMERIN, D.G.; PROMYSLOV, V.F.; ERISTOV, V.S.;
SAPOZHNIKOV, F.V.; KASATKIN, M.V.; ALEKSANDROV, M.Ya.; KOTILEVSKIY,
D.G.

Fedor Georgievich Loginov; obituary. Elek.sta. 29 no.8:1-2
Ag '58. (MIRA 11:11)

(Loginov, Fedor Georgievich, 1900-1958)

NEPOROZHNIY, P.S. (Moskva); BELYAKOV, A.A. (Moskva); RUSSO, G.A. (Moskva);
BOROVY, A.A. (Moskva); NEKRASOV, A.M. (Moskva); MILOSLAVSKIY,
N.A. (Moskva); ROKOTYAN, S.S. (Moskva); RAZGON, V.E., inzh.;
TSVIRAVA, G.K., inzh. (g.Boksitogorsk)

Principal trends in over-all electrification. Elektrichestvo
no. 11:87-90 N '60. (MIRA 13:12)

1. Mosenergo (for Razgon). (Electrification)

KARAVAY, N.M., inzh.; NIKOLASOV, A.M., inzh.

Power engineering of the U.S.S.R. in 1959, the first
year of the seven-year plan. Elek. sta. 31 no. 5-9
Ap '60. (MIRA 13:7)

(Electric power plants)

ZHILIN, V.G., inzh.; NEKRASOV, A.M., inzh.

Specifications for thermal power plants to be built in the period
from 1959 to 1965. Elek. sta. 31 no.6:8-24 Je '60. (MIRA 13:7)
(Electric power plants)

NEKRASOV, A.M., inzh.; RYAZANOV, F.A., inzh.

Thermal electric power plants from the beginning of the plan of
the State Commission for the Electrification of Russia to the
present. Elek. sta. 31 no. 12:5-9 D '60. (MIRA 14:5)
(Electric power plants)

NEK ABCV, a.s., inzh.; P. V. ...

Accelerating work for electric power engineering program.
Teploenergetika ...
(Power engineering)

MELEVINSKIY, G.S., inzh.; NEKRASOV, A.M., inzh.

Problems concerning the future development of thermal electric power
plants and electric networks. Elek.sta. 32 no.4:2-9 Ap '61.
(MIRA 14:7)

(Electric power plants) (Electric power distribution)

SIROMYATNIKOV, I.A.; NEKRASOV, A.M.; LEBEDEV, A.A.; KOSTENKO, M.P.;
NEYMAN, L.R.; VASIL'YEV, D.V.; KAMENSKIY, M.D.; USOV, S.V.;
POCSE, A.V.; UL'YANOV, S.A.; FAZYLOV, Kh.F.

Professor N.N. Shchedrin; on his seventieth birthday and fortieth
anniversary of his educational work. Elektrichestvo no.1:94-
95 Ja '62. (MIRA 14:12)

(Shchedrin, Nikolai Nikolaevich, 1891-)

NEKRASOV, A.M., inzh.; SERBINOVSKIY, G.V., inzh.

Problems concerning the further development of electric networks
and increase in the quality of voltage. Elek. sta. 34
no.3:2-7 Mr '63. (MIRA 16:3)
(Electric power distribution)

NEPOROZHNIY, P.S. (Moskva); BELYAKOV, A.A. (Moskva); RUSSO, G.A. (Moskva);
BUROVOY, A.A. (Moskva); NEKRASOV, A.M. (Moskva); ROKOTYAN, S.S.
(Moskva); MILOSLAVSKIY, N.M. (Moskva); SYROMYATNIKOV, I.A.,
doktor tekhn. nauk, prof.

Principal trends in the realization of over-all electrification.
Elektrichestvo no.8:77-82 Ag '63. (MIRA 16:10)

ALEKSEENKO, G.V.; SYROMYATNIKOV, I.A.; NEKRASOV, A.M.; KRIKUNCHIK, A.B.;
RABINOVICH, S.I.; CHUSOV, P.P.; CHERTIN, A.M.; BULGAKOV, N.I.;
BRITCHUK, V.V.; MAN'KIN, E.A.; PANOV, A.V.; SAPOZHNIKOV, A.V.;
SAGALOV, M.I.; VOYEVOJIN, I.D.; ANTONOV, I.A.;
KALINICHENKO, I.S.; KRAYZ, A.G.

L.M. Shnitsar; on his 75th birthday. Elektrichestvo no.11:87-
88 N '63. (MIRA 16:11)

NEKRASOV, A.M., red.; ROKOTYAF, S.S., red.; NIKOLAYEVA, M.I.,
red.

[500 Kv. long-distance power transmission lines] Dai'nie
elektropredachi 500 kv.; sbornik statei. Moskva, Izd-vo
"Energiia," 1964. 380 p. (MIRA 17:6)

NEPCHENNY, P.S.; FIDOC N.V., Ya.; FIDOC N.V., Ya.; FIDOC N.V., Ya.;
SAVINYKH, A.I.; SAICHENKOV, P.Y.; SEMENOV, A.M.; SEMENOV, N.M.;
NEPRASOV, A.M.; POBYAY, A.A.; POBYAY, A.A.; POBYAY, A.A.;
KULBAKIN, V.S.; BOGOMOLOV, A.A.

Ivan Ivanovich Kozlov, 1. 1911. Military. 1931-1932. 1933-1934.
1935-1936. Mr. 1935.

S: TEYNGAUZ, Yevgeniy Oskarovich; NEKRASOV, A.M., red.; LITVIN, A.
S.N., red.

[The fuel-power balances of the main capitalist countries:
Toplivno-energeticheskie balansy osnovnykh kapitalisticheskikh
stran. Moscow, Izd-vo "Energiya," 1974. 127 p.

(S) A 111

ALEKSEYENKO, G.V.; BORISENKO, N.I.; VOYEVODIN, I.D.; DROZDOV, N.G.; KRAYZ, A.G.;
MAN'KIN, E.A.; MAYORETS, A.I.; NEKRASOV, A.M.; NAYASHKOV, I.S.; PAVLENKO,
A.S.; ROKOTYAN, S.S.; SOBOLEV, A.A.; SYROMYATNIKOV, I.A.; SAPOZHNIKOV,
A.V.; SARKISOV, M.A.; CHERNICHKIN, D.S.; CHERTIN, A.M.

Samuil Isaakovich Rabinovich, 1905; on his 60th birthday. Elektri-
chestvo no.6:90 Ja '65. (MIRA 18:7)

L 22164-66 EWP(d)/EWP(f)/EWP(c)/EWP(v)/T/EWP(k)/EWP(l)/ETC(m)-6

ACC NR: AP6(1)3604

SOURCE CODE: UR/0104/65/000/010/0002/0008

AUTHOR: Drotyshv, A. I. (Engineer); Nekrasov, A. N. (Engineer)

ORG: none

TITLE: Continuous-flow production methods, the basis of power construction

SOURCE: Elektricheskiye stantsii, no. 10, 1965, 2-8

TOPIC TAGS: reinforced concrete, concrete, electric power plant, construction

ABSTRACT: In this article, printed as a subject for discussion, the authors state that the continuous-flow method of construction, in which work proceeds at different stages in different sections of a construction project, with work crews for each of the stages progressing from one end to the other of the project area as they complete their particular stages of construction at each individual area, is the most efficient, allowing savings of time on the order of 25-50% over the method of completion of all construction on one section before moving to another. With increasing size of the power units being constructed, the available transportation creates a bottleneck in construction when the "single-flow" or one-pass system of continuous flow construction is used; therefore, in power unit construction involving units of over 100 Mw capacity, it becomes necessary to go over to a

37
B

Card 1/2

UDC: 621.311.22.002.2

2

L 22464-66

ACC NR: AP6013604

dual-flow method, with two sets of construction teams progressing from one end of the construction area to the other. This requires careful planning, to assure that the second team will not have to wait for completion of preliminary work by the first team, setting of concrete, etc. in the progress of its operations. The usage of modern construction techniques and materials is essential to good planning, although it is noted that some modern materials, such as precast reinforced concrete, are unsuitable for load-bearing frames of the above-ground portions of the stations in many cases. Orig. art. has: 3 figures. [JPRS]

SUB CODE: 13, 10 / SUBM DATE: none

cont 2/2 BK

I 10997-66

SOURCE CODE: UR/0105/65/000/003/0090/0091

ACC NR: AP6001678

AUTHOR: Neporozhniy, P. S.; Finogenov, Ya. I.; Lavrenenko, K. D.; Veselov, N. D.; Savinykh, A. I.; Sapozhnikov, F. V.; Serdyukov, N. P.; Chuprakov, N. M.; Nekrasov, A. M.; Borovoy, A. A.; Kotilevskiy, D. G.; Steklov, V. Yu.; Kulebakin, V. S.; Bogdanov, N. P.

14
B

ORG: none

TITLE: Petr Ivanovich Voyevodin/

SOURCE: Elektrichestvo, no. 3, 1965, 90-91

TOPIC TAGS: electric engineering personnel, political personnel

ABSTRACT: P. I. VOYEVODIN died on 25 November 1964; one of the oldest bolshevik-Leninists, he was a member of the CPSU already in 1899. He fought in the early battles of the revolution, was imprisoned and sent to Siberia in 1905. After the October Revolution he became an economic adviser to Lenin on matters pertaining to Siberia and the entire Soviet Union as well. He was active in planning and organizing GOELRO. In 1921 he was assigned to set up the new Russian cinema industry, later he turned to the problems of electrification: spreading Lenin's ideas, publishing books and periodicals on the subject. He was the first Soviet editor of "Elektrichestvo" and then the editor of "Elektrifikatsiya." He partici-

UDC: 621.311

Card 1/2

L 10997-66

ACC NR: AP6001878

ated in the International Power Conferences in Berlin 1930 and in Belgrade 1956. His entire life was devoted to faithful service in the interests of the Communist Party; in 1964, he was duly awarded the Order of Lenin and was named a Hero of Socialist Labor. Orig. art. has: 1 figure. [JPBS]

SUB CODE: 05, 09 / SUBM DATE: none

PC

Card 2/2

L 22594-00 EWT(d)/EWP(k)/EWP(1)

ACC NR: AP6012999

SOURCE CODE: UR/0105/65/000/006/0090/0090

AUTHOR: Alekseyenko, G. V.; Borisenko, N. I.; Voyevodin, I. D.; Drosdov, N. G.; Krayz, A. G.; Man'kin, E. A.; Mayorets, A. I.; Nekrasov, A. M.; Nayashkov, I. S.; Pavlenko, A. S.; Rokotyan, S. S.; Sobolev, A. A.; Syromyatnikov, I. A.; Sapozhnikov, A. V.; Sarkisov, M. A.; Chernichkin, D. S.; Chertin, A. M.

ORG: none

TITLE: S. I. Rabinovich (on the occasion of his 60th birthday)

SOURCE: Elektrichestvo, no. 6, 1965, 90

TOPIC TAGS: electric engineering personnel, electric transformer, hydroelectric power plant

ABSTRACT: The chief specialist of transformer building of the Gosplan (State Planning Commission) USSR, Samuil Isaakovich Rabinovich was born in 1905 in the town of Borisoglebsk of the Voronezh Oblast'. From his student years at the Gosudarstvennyy elektromashinostroitel'nyy institut (State Machine-Building Institute) he already showed interest for power transformers. In the early thirties he designed the first types of domestic Soviet 110 and 220 kV transformers; in 1939 he became the chief designer of the Moskovskiy transformatornyy zavod (Moscow Transformer factory). In 1946, he conducted the design and construction of lightning-resistant transformers; during 1949-1954,

Card 1/2

UDC: 621.314(092)

z 22594-66

ACC NR: AP6012999

he headed the design of the 400 kV transformer equipment for the Volzhskaya hydroelectric power station - Moscow power line; his subsequent work on the 500 kV equipment earned him the Lenin prize.¹⁴ From 1960, he has been working at the Gosplan USSR. He is also a member of the editorial board of the journal Elektrichestvo (Electricity). Orig. art. has: 1 figure. [JPRS]

SUB CODE: 10, 09 / SUBM DATE: none

Card 2/2 *See*

NEKRASOV, H. N.

AID P - 626

Subject : USSR/Electricity

Card 1/1 Pub 27 - 10/35

Authors : Nekrasov, A. N., Syromyatnikov, I. A., Chilikin, M. G.,
Solov'yev, I. I., Glazunov, A. A., Sirotinskiy, L. I.,
Ivanishchenko, P. D., Venikov, V. A., Chetverichenko, A. N.
and others

Title : Professor A. M. Fedoseyev On His 50th Birthday and
25 years of Scientific, Educational and Engineering
Activity (Current News)

Periodical : Elektrichestvo. 8. 89, Ag 1954

Abstract : A short biographical sketch and a description of
scientific activity is given.

Institution : Not given

Submitted : No date

MASLENNIKOV, Ye.A.; NEKRASOV, A.V.; PUSTOVYI, Yu.M.

Generation and maintenance of pressures below 10^{-8} torr.
in large metal vessels. Prib. i tekhn. eksp. 8 m. 1963-156
S-0 '63. MIRA 1963

NEKRASOV, Aleksandr Serg-yeovich, kand. tekhn. nauk; YAKUSHEVA,
V.A., inzh., nauchr. red.; KROMCHCH, I.L., red.

[Framed buildings with wall filling of local building
materials] Karkasnye zdaniia s zapolneniem sten mestnymi
stroitel'nyimi materialami. Moskva, Stroiizdat, 1964. 130 p.
(MIRA 17:6)

NEKRASOV, A S.

(S) NAME: NEKRASOV, A S. / 001/001

Author: V.I. Neys, S.A. Gurevich, V.I. Demin, A.G. Zamboris, S.A. Buzdakov, B.P. Dvornikov, S.B. Litvinov, V.K. Malozemov, V.F. Lashov, S.F. Lukatskiy, S.V. Mikhlin, G.I. Nosovitskiy, S.V. Pletzer

Subject: Energy planning policy energeticheskoy strany (Basic Energy Planning Policy of the USSR) (USSR) Moscow, Institute of Energy, 178 p. Brno: 1979, 2,500 copies printed.

Operating Agency: Atomenergoproekt, Energeticheskoy Institut.

Editor: S.A. Dvornikov, Academician and V.I. Neys, Corresponding Member, USSR Academy of Sciences; Prof. Dr. S.A. Gurevich.

Summary: This book is intended for government planning divisions, scientific research organizations and others interested in the electrification of the USSR.

The book contains the principal problems of a unified power system for the USSR as a basis for a program of government planning in that field. It is the result of several years of study conducted mainly at the Power Engineering Institute of the Academy of Sciences, USSR, in cooperation with other engineering institutes of the individual Soviet Republics, universities and research institutes, and in close cooperation with the Gossplan, USSR. These studies are concerned with basic problems of a scientific and technical policy for the prospective development of a unified electric power system in the USSR. The present situation and applicable trends in the power system are outlined in the first two chapters. The plan for the development of the power system is outlined in the third chapter. It is possible to develop the power system in the USSR by the construction of steam turbine electric power plants with a simultaneous increase in hydro-power developments, including the most economical use of those which are the only or the main sources of power in a given region or are directed by other needs, such as irrigation, river control, etc. Nuclear plants will play a steadily increasing role in the development of a unified power system. The book contains a number of appendices, including the application of mathematical computers for automatic control, regulation and protection of the system, the increasing use of seal-water turbines, the use of various types of fuels, etc. These problems were investigated in earlier publications of the Academy of Sciences USSR (Scientific Series in the "Electricity and Development of a Unified Power System in the USSR") in a series of volumes. The work was done in 1978 and 1979 and represents the latest scientific results with regard to the electrification of the USSR.

PLANNING AND DESIGN

Abstracts with titles. Separately listed in G.S. Bibliography
Problems connected, generally polytechnical in nature. G.S. Bibliography
(Problems of Power Engineering: Collection of Articles Dedicated to
2,500 copies printed)

Abstracts with titles. Separately listed in G.S. Bibliography
Problems connected, generally polytechnical in nature. G.S. Bibliography
(Problems of Power Engineering: Collection of Articles Dedicated to
2,500 copies printed)

Abstracts with titles. Separately listed in G.S. Bibliography
Problems connected, generally polytechnical in nature. G.S. Bibliography
(Problems of Power Engineering: Collection of Articles Dedicated to
2,500 copies printed)

Abstracts with titles. Separately listed in G.S. Bibliography
Problems connected, generally polytechnical in nature. G.S. Bibliography
(Problems of Power Engineering: Collection of Articles Dedicated to
2,500 copies printed)

Abstracts with titles. Separately listed in G.S. Bibliography
Problems connected, generally polytechnical in nature. G.S. Bibliography
(Problems of Power Engineering: Collection of Articles Dedicated to
2,500 copies printed)

Abstracts with titles. Separately listed in G.S. Bibliography
Problems connected, generally polytechnical in nature. G.S. Bibliography
(Problems of Power Engineering: Collection of Articles Dedicated to
2,500 copies printed)

Abstracts with titles. Separately listed in G.S. Bibliography
Problems connected, generally polytechnical in nature. G.S. Bibliography
(Problems of Power Engineering: Collection of Articles Dedicated to
2,500 copies printed)

Abstracts with titles. Separately listed in G.S. Bibliography
Problems connected, generally polytechnical in nature. G.S. Bibliography
(Problems of Power Engineering: Collection of Articles Dedicated to
2,500 copies printed)

S/094/61/000/001/001/007
E073/E335

AUTHORS: Nekrasov, A.S. and Sinyak, Yu.V.

TITLE: Comparison of the Specific Consumptions of
Electricity and Gas in Heating Processes

PERIODICAL: Promyshlennaya energetika, 1961, No. 1,
pp. 4 - 9

TEXT: The specific consumption is determined for insulated holding furnaces of the conveyor or pusher type with specific loading rates of 150 - 220 kg/m² hour for normalisation annealing and 40 - 70 kg/m² hour for annealing, gas cementation, etc. A comparison is made for characteristic hourly rates of gas furnaces and electric resistance furnaces of equal productivity per unit of floor space. Induction heating has not been considered. In gas furnaces recuperative air ^{pre-}heating to 400 °C was applied if the required temperatures were 600 °C or higher. On increasing the air temperature to 1 000 - 1 050 °C a furnace efficiency of 38-42% can be achieved in the case of non-oxidizing heating. Preliminary

Card 1/4

S/094/61/000/001/001/007
E073/E335

Comparison of the Specific Consumptions of Electricity and Gas in Heating Processes

analysis has shown that for determining the efficiency of utilisation of electricity and gas for heating purposes it is sufficient to consider the following main technological processes:

1

Card 2, 4

S/094/61/000/001/001/007
E073/E335

Comparison of the Specific Consumptions of Electricity and Gas in Heating Processes

	Temperature, t, °C	Heating and soaking time τ , hrs	Approximate relative auxiliary times
Tempering low temperature	150-350	1-3	0.2
high temperature	350-650	1-3	0.2
Annealing	700-900	3-6	0.3
Hardening and normalisation annealing	850-1000	1-3	0.3
Carburisation	900-950	6-10	0.5
Heating to the forging temperature	1100-1250	0.5-1.5	0.1



The comparison is made solely on the basis of heat consumption and not on the basis of costs, i.e. the electricity consumption in kW/ton is compared with the consumption of natural gas in m^3 /ton of material to be heated. The use of the derived relation is illustrated on the example of heating a cylindrical Card 3/f

S/094/61/000/001/001/007
E073/E335

Comparison of the Specific Consumptions of Electricity and Gas in Heating Processes

component to 1 000 °C in gas and electric furnaces. The authors recommend that electric heating be introduced starting from the higher temperature range of 1200 - 800 °C and then in the temperature range 600 - 200 °C. In the temperature range 600 - 800 °C gas heating is more efficient from the point of view of heat consumption. The proposed relations enable evaluating in the first approximation the changes in the specific heat consumption as a function of the temperature and the heating time and revealing the separate influence of each of these factors on the specific heat consumption. The divergence between calculated and measured values of heat consumption varied between 2.9 and 14.4%, the calculated values being lower in every case than the measured values. There are 5 figures, 2 tables and 5 Soviet references.

Card 4/4

KUZNETSOV, Yu.A.; MAKAROV, A.A.; MELENT'YEV, L.A.; MERENKOV,
A.F.; NEKRASOV, A.S.; TSVETKOV, N.I.; KUZNETSOV, Yu.A.;
MAKAROVA, A.S.; KARICV, V.G.; MANANOV, Yu.I.; SYNOV,
Yu.P.; KHIL'EV, L.S.; TSVETKOVA, L.A.; VOYTSHEKHOVSKAYA,
G.V.; YEFIMOV, N.T.; LITVINOV, G.A.; BELYAYEV, L.A.;
BELYAYEV, L.S.; GAI, M.; KASHELEV, B.G.; KUMY, L.A.;
LIPO, T.N.; SVIRKUN, L.N.; BRUZHILIN, I.P.;
KONOVALENKO, Z.F.; KHA'YANOVA, N.V.; SHEVARTSBERG, A.I.;
NIKONOV, A.F.; STARIKOV, L.A.; IGOYRIN, L.S.; FULENBERG,
N.N.; TROSHINA, G.M.; CHEL'TSA, M.B.; SVETLOV, K...;
JUNAROKOV, S.V.; TAKAYSEVILI, M.K.; TOLMACHEVA, N.I.;
KHASILEV, V.Ya.; KOSHELEV, A.A.; KUDINOVA, L.I., red.

[Methods for using electronic computers in the optimization of power engineering calculations] Metody primeneniia elektronno-vychislitel'nykh mashin pri optimizatsii energeticheskikh raschetov. Moskva, Nauka, 1962. 318 p.

(MIRA 17:11)

1. Akademiya nauk SSSR. Sibirskoye otdeleniye. Energeticheskii institut. 2. Khen-odresponen' AI SSSR (for Meleht'yev).

NEKRASOV, A.S.; KURGANOVA, M.A.

Problems concerning the comparison of principal networks for the electric power supply of industry engaged in high-temperature operations. Obshch.energ. no.4:18-28 '61. (MIRA 14:8)
(Electric power distribution)

KUZNETSOV, Yu.A., inzh.; MERENKOV, A.P., inzh.; MELENT'YEV, L.A.;
NEKRASOV, A.S., kand.ekon.nauk

Using electronic calculating machines for analyzing the optimum
structure of a promising power balance. Ieploenergetika 9 no.5:
3-10 My '62. (MIRA 15:4)

1. Energeticheskiy institut Sibirskogo otdeleniya AN SSSR.
2. Chlen-korrespondent AN SSSR (for Melent'yev).
(Power resources)

MERENKOV, A. P.; NEKRASOV, A. S.; NEKRASOVA, O. A.

Determining the efficient sorting and utilization of fuel by
the method of linear programming with an electronic computer.
Ugol' 37 no.10:42-46 0 '62. (MIRA 15:10)

1. Energeticheskiy institut Sibirskogo otdeleniya AN SSSR.

(Electron digital computers—Programming)
(Coal—Classification)

MAZOVER, Ya.A.; NEKRASOV, A.S.; SAVEL'YEV, V.K.

Future geography of the fuel-power economy of the U.S.S.R.
Vop. geog. no.57:22-38 '62. (MIRA 15:10)
(Power resources)

NEKRASOV, A.S., kandidat tekhnicheskikh nauk.

Precast foundations for 2-3 story buildings. Nov.tekh.1pered.op.
v stroi. 18 no.6:8-10 Je '56. (MLBA 9:8)

(Foundations)

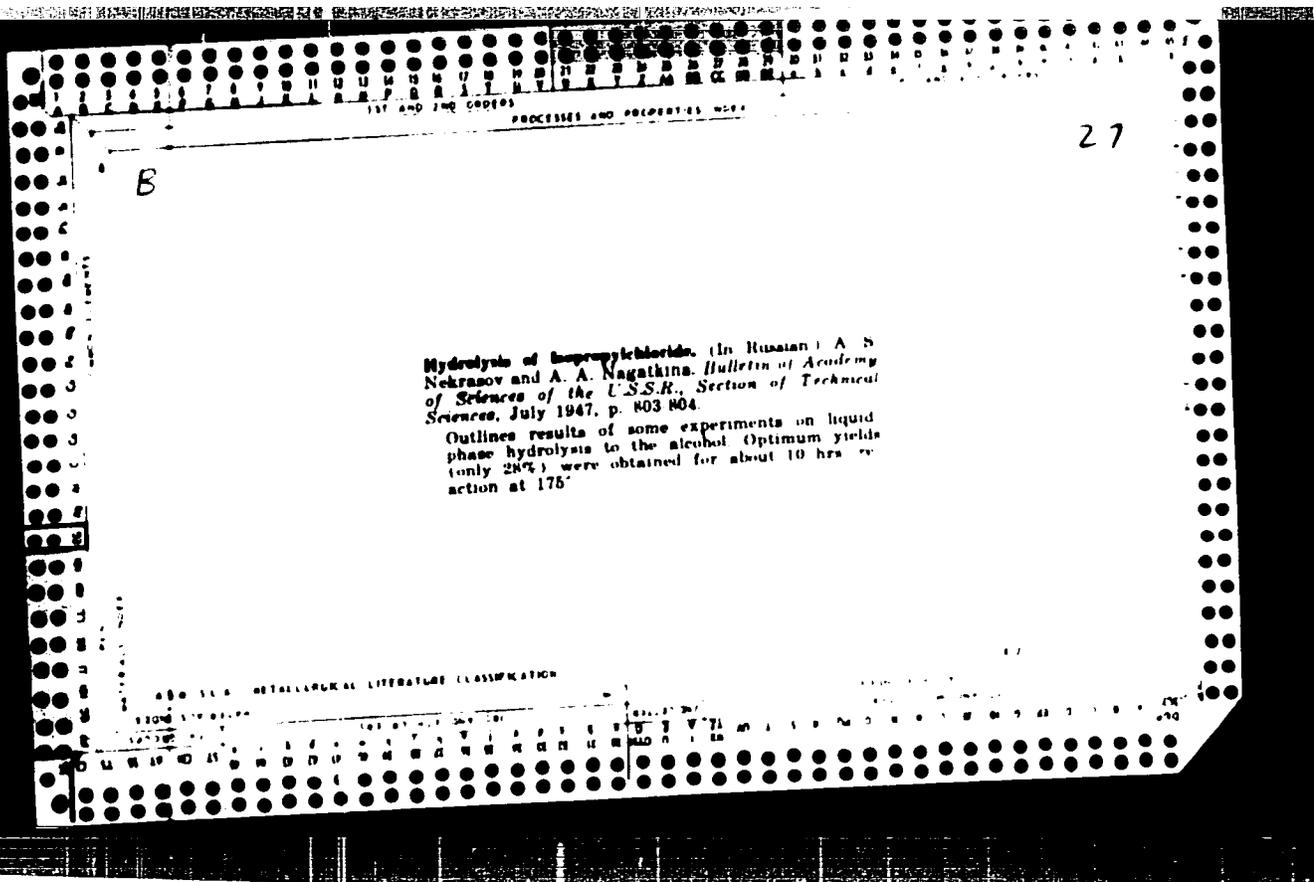
NEKRASOV, Aleksandr Semenovich; SINYAK, Yuriy Vladimirovich;
KLEMPOT'SKIY, A.M., ed.

Economic aspects of power engineering for heat engines
[Ekonomika energetiki protsessov i rezhimov] / A.M. Klempot'skiy, Y.V. Sinyak, A.S. Nekrasov, eds.;
Energiya, 1969. 134 p.

063-

KUZNETSOV, Yu.A., kand. ekonom. nauk; NEKRASOV, A.S., kand. ekonom.
nauk; NIKONOV, A.P., kand. ~~tekh. nauk~~

Use of mathematical modeling techniques in the comparison of
composite and separate power distribution networks. Elek. sta
36 no.4:86-87 Ap '65. (MIRA 18:6)



NEKRASOV, A. S.

Chemical Abstr.
Vol. 48 No. 6
Mar. 25, 1954
Organic Chemistry

On the addition of hydrogen chloride to propylene in the
gaseous phase. A. S. Nekrasov and V. N. Karicheva,
Dokl. Akad. Nauk S.S.S.R., No. 1, 180-2
(1953). Ratio of propylene to HCl was 1/1.5, temps. were
60-80°, vol. speed 0.5 and 4.5, and catalyst alkoxide
dry. For vol. speed of 0.5, yield of 2-chloropropane was
7.5% at 60° and 40% at 80°; above 100°, yield decreased.
For vol. speed of 4.5, there was no reaction below 100° at
60°. It was 3% at 100°, it was 85.7% and above 100°
yield decreased.
B. Z. Kamich

USSR/Chemistry - Isopropyl Alcohol
Chemistry - Aluminum Silicates, as Catalysts
Apr 49

"Removing From Synthetic Isopropyl Alcohol," A. S. Nekrasov, B. A. Krentsel', Petroleum Inst., Acad Sci USSR, 5 pp

45/49713

"Is Ak, Nauk SSSR, Otdel Tekh Nauk" No 4

Author has developed improved method of removing admixtures (polymeric hydrocarbons, diisopropyl ether, oxygen and sulfur compounds) from isopropyl alcohol, using alumsilicate catalysts. Losses of alcohol throughout experiment varied from 1.5 to 2%. Device contains a dropping tube (fitted with a dripcock), a

45/49713

USSR/Chemistry - Isopropyl Alcohol (Contd) Apr 49

tube filled with the catalyst (in an electric furnace), a collector, a Fischchenko vial, and gas holder. Submitted by Acad S. S. Nametkin, 6 Oct 48.

45/49713

NEKRASOV, A. S.

NEKRASOV, A. S.

PA 67/49T47

USSR/Chemistry - Alcohols
Ether, Diisopropyl

May 49

"Catalytic Dehydration of Isopropyl Alcohol Into
Diisopropyl Ether," A. S. Nekrasov, B. A. Krentsel',
2 1/2 pp

"Zhur Obshch Khim" Vol XIX, No 5

Isopropyl alcohol was dehydrated at 160-170° in the
vapor phase over an aluminosilicate catalyst into
diisopropyl ether with a yield of 40-50% for a single
operation, and accompanied by a not more than
5% yield of propylene. Submitted 14 Feb 48.

67/49T47

NEKRASOV, A. S.

Chemical Abst.
Vol. 48 No. 8
Apr. 25, 1954
Petroleum, Lubricants, and Asphalt

~~The catalytic polymerization of technical butenes.~~
~~A. S. Nekrasov, Izv. Vuzovsk. Khim. 1954, No. 2, 182-8 (1954).~~ The catalytic polymerization of tech 2-butens was studied with the aim of getting a product with a high octane no. The 2-butene contained about 25% butadiene and 1-2% ethylene and propylene as impurities. Attempts to remove the butadiene with indene or HCl were unsuccessful. The catalysts tried were ortho phosphoric acid on pumice carrier or on activated C as a carrier (portions 1:1 by weight), phosphoric acid with a Cd salt (38.9 g. Cd₂(POH)₂, 39.5 g. H₃PO₄) and heavy phosphoric acid. The last was made from kieselguhr and pyrophosphoric acid. The polymerizations were carried out at 200-225° and 2-5 atm. All the catalysts gave the same results. The product boiled over the range 18-365° with 65% boiling below 200°. The fraction boiling at 20-200° contained 80% or more of unsatd. compds., 4-12% aromatic compds., and 1-5% naphthenes and paraffins. The octane no. for this fraction was 78. Hydrogenation sufficient to decrease the per cent unsatd. compds. to 30-35% did not change the octane no. This indicates that polymerization has been accompanied by isomerization. If the butadiene could be removed it is believed better results could be attained.
Joseph B. Levy

1954
JBL

NEKRASOV, A. S.

V. M. Rodionov, A. K. Ruzhentsova, A. S. Nekrasov, N. N. Mel'nikov

"Academician Sergey Semonovich Nametkin" (1876-1950), Zhurnal Obshchey Khimii, Vol. XXI, No. 12, 1951 Pp. 2101-2146

Extracts available discussing Nametkin's work in the fields of (I) Nitration of Hydrocarbons, and (IV) Plant Growth Stimulants and Herbicides. The portion of the article not included is chiefly a review of Nametkin's work on terpenes and essential oils.

SO: A-22507

NEKRASOV, A. S.

Chemical Abstr.
Vol. 48
Apr. 10, 1954
Petroleum, Lubricants, and Asphalt

(2)
~~Nekrasov, A. S. and Kuznetsov, L. A.:~~ *Khimicheskoe
ispol'zovanie neftykh i uglevodorodnykh gazov* (Chemical
Utilization of Petroleum Hydrocarbons Gases). Moscow:
Izdaniye Akad. Nauk S.S.S.R., 1952. 144 pp. 6 R.
78 Kop.

7-10-54
[Signature]

NEKRASOV, F. S.

3

PHOTOLYSIS OF CaCO₃ AT 1200°C

Calcium carbonate (99.99% pure, CaCO₃) was heated in a vacuum furnace under pressure (100-150 mm Hg) at 1200°C for 24 hr. The resulting powder, which contained 0.1% of CaO, was dried in a vacuum oven at 100°C for 48 hr. The powder was then placed in a glass ampoule, sealed at 10⁻⁴ mm Hg, and heated in the furnace at 1200°C for 24 hr. The ampoule was then cooled and broken, and the powder was dried in a vacuum oven at 100°C for 48 hr. The residue was then analyzed for Ca and CO₂.

The results of the analysis are shown in the following table:

Temp. (°C)	Ca (wt. %)	CO ₂ (wt. %)
1200	44.7	55.3
1200	44.8	55.2
1200	44.9	55.1

The results show that the decomposition of CaCO₃ at 1200°C is complete, and the residue consists of CaO and CO₂.

PHOTOLYSIS OF CaCO₃ AT 1300°C

Calcium carbonate (99.99% pure, CaCO₃) was heated in a vacuum furnace under pressure (100-150 mm Hg) at 1300°C for 24 hr. The resulting powder, which contained 0.1% of CaO, was dried in a vacuum oven at 100°C for 48 hr. The powder was then placed in a glass ampoule, sealed at 10⁻⁴ mm Hg, and heated in the furnace at 1300°C for 24 hr. The ampoule was then cooled and broken, and the powder was dried in a vacuum oven at 100°C for 48 hr. The residue was then analyzed for Ca and CO₂.

The results of the analysis are shown in the following table:

Temp. (°C)	Ca (wt. %)	CO ₂ (wt. %)
1300	44.7	55.3
1300	44.8	55.2
1300	44.9	55.1

The results show that the decomposition of CaCO₃ at 1300°C is complete, and the residue consists of CaO and CO₂.

PHOTOLYSIS OF CaCO₃ AT 1400°C

Calcium carbonate (99.99% pure, CaCO₃) was heated in a vacuum furnace under pressure (100-150 mm Hg) at 1400°C for 24 hr. The resulting powder, which contained 0.1% of CaO, was dried in a vacuum oven at 100°C for 48 hr. The powder was then placed in a glass ampoule, sealed at 10⁻⁴ mm Hg, and heated in the furnace at 1400°C for 24 hr. The ampoule was then cooled and broken, and the powder was dried in a vacuum oven at 100°C for 48 hr. The residue was then analyzed for Ca and CO₂.

The results of the analysis are shown in the following table:

Temp. (°C)	Ca (wt. %)	CO ₂ (wt. %)
1400	44.7	55.3
1400	44.8	55.2
1400	44.9	55.1

The results show that the decomposition of CaCO₃ at 1400°C is complete, and the residue consists of CaO and CO₂.

PHOTOLYSIS OF CaCO₃ AT 1500°C

Calcium carbonate (99.99% pure, CaCO₃) was heated in a vacuum furnace under pressure (100-150 mm Hg) at 1500°C for 24 hr. The resulting powder, which contained 0.1% of CaO, was dried in a vacuum oven at 100°C for 48 hr. The powder was then placed in a glass ampoule, sealed at 10⁻⁴ mm Hg, and heated in the furnace at 1500°C for 24 hr. The ampoule was then cooled and broken, and the powder was dried in a vacuum oven at 100°C for 48 hr. The residue was then analyzed for Ca and CO₂.

The results of the analysis are shown in the following table:

Temp. (°C)	Ca (wt. %)	CO ₂ (wt. %)
1500	44.7	55.3
1500	44.8	55.2
1500	44.9	55.1

The results show that the decomposition of CaCO₃ at 1500°C is complete, and the residue consists of CaO and CO₂.

PHOTOLYSIS OF CaCO₃ AT 1600°C

Calcium carbonate (99.99% pure, CaCO₃) was heated in a vacuum furnace under pressure (100-150 mm Hg) at 1600°C for 24 hr. The resulting powder, which contained 0.1% of CaO, was dried in a vacuum oven at 100°C for 48 hr. The powder was then placed in a glass ampoule, sealed at 10⁻⁴ mm Hg, and heated in the furnace at 1600°C for 24 hr. The ampoule was then cooled and broken, and the powder was dried in a vacuum oven at 100°C for 48 hr. The residue was then analyzed for Ca and CO₂.

The results of the analysis are shown in the following table:

Temp. (°C)	Ca (wt. %)	CO ₂ (wt. %)
1600	44.7	55.3
1600	44.8	55.2
1600	44.9	55.1

The results show that the decomposition of CaCO₃ at 1600°C is complete, and the residue consists of CaO and CO₂.

1. NEKRASOV, A.S.; KALININ, P.A.
2. USSR (600)
4. Hydrocarbons
7. "Chemical utilization of petroleum hydrocarbon gases." U.S. Technical Report, reviewed by P.A. Kazanskiy, Y.A. S. Sidorov, Ispekhi. Khim. Pr. 1964.

9. Monthly List of Russian Accessions. Library of Congress, 1964.

LUX'YANITSA, V.G.; NEKRASOV, A.S.; TOPCHIYEV, A.V., akademik.

Determination of organic sulfides by the method of potentiometric titration. Dokl. AN SSSR 90 no.6:1043-1044 Je '53. (MLRA 6:6)

1. Akademiya nauk SSSR (for Topchiyev).
(Sulfides) (Volumetric analysis)

BEKRASOV, A. S.

Stannic chloride compound of thiophane. E. N. Katsina and A. S. Bekrasov. *Doklady Akad. Nauk S.S.S.R.* 173-4 (1966) ~~transferred~~ added to thiophane with cooling in ether soln. produces $C_4H_4S_2SnCl_4$, m. 164-7° (from CO_2), regardless of the proportions of the reactants. The complex does not react even with hot CaH_2 , but is rapidly decompd. by cold H_2O . It can be used for the purification of thiophane. $(iso-Am)_2S_2$ (7.2 g.) treated in the cold with 4.6 g. $SnCl_4$, then with 3.1 g. thiophane, immediately gave a ppt. of 7.35 g. of the above complex. Attempts to open the thiophane ring by heating in the presence of $SnCl_4$, with $AcCl$, $BaCl_2$, or Ac_2O or Ba_2O failed. Some 80% thiophane was recovered unchanged and the rest formed an insol. tar. However, when C_6H_6 was used as the solvent, it entered the expected reactions; thus, with $AcCl-SnCl_4$ in the ratio 1:2.2, 7% $AcPh$ was formed. Refining 10.2 g. Ac_2O , 54.6 g. $SnCl_4$, and 40 ml. C_6H_6 , 6 hrs. gave a trace of $AcPh$ (about 0.8 g.).
O. M. K.

Inst. Petroleum, A.S. USSR (for Bekrasov)

10-15-50, 11/15

Reaction of aluminum chloride with acetic chloride. R. N. Kelly, U.S. Army, Fort Monmouth, N. J.
AcCl (m.p. 118°C) + AlCl₃ (m.p. 190°C) → Al₂Cl₆ (l) in 100 ml. CCl₄ (b.p. 77°C) (1), yielding 21.4 g. solid complex, m.p. 60°C (lit. 60°C). The 2 forms have the same empirical formula Al₂Cl₆. Fractionation is difficult since the 2 changes to the 22 very readily and the latter is almost insol. in org. solvents. It reacts with CCl₄ in which it is not gradually changes to Al₂Cl₆. Boiling with H₂O serves to produce the 22 with formation of 1, and the transition to 22 also occurs in the process. The latter is unchanged by hot H₂O or HCl acid. 22 is precipitated by addition of hot H₂O. Treatment of 1 with AcCl in the presence of SnCl₄ yields 70% 22 which does not react with AcCl. The reactivity of 1 varies differently in various solvents: in CCl₄ there occurs the formation of FeCl₃ by reaction of 1 with the solvent. Thus, 21.4 g. 1 in 25 ml. CCl₄ treated with 15 g. AcCl followed by 25 g. SnCl₄ with cooling gave a colorless ppt. after refluxing 6 hrs. the cooled mass. was poured on ice and the org. layer was used. The solid suspended in the aq. layer was sep'd., dried and oxid. with H₂O₂ continuously, yielding a residue of 20.4 g. 22. The combined org. layers gave some 5 g. tarry matter, about 1 g. FeCl₃, and a small amount of a solid C₂H₄O, m. 60°, provisionally identified as 2-butanone. Reaction of 1 with AcCl and SnCl₄ in CCl₄ gave after 1 hr. after a good yield (25.45 g. from 21.4 g. 1 of 22 and 2 g. FeCl₃, b.p. 70.5°, n_D 1.5233 (70% based on 1 which did not form the complex). Calc.

100% of the ester with HCl gave FeCl₃·6H₂O, identified as 22. Q. M. Kesterson

MERRASIN

4

Determination of organic sulphides by potentiometric titration
V. G. Lukyanov and A. B. Neizikov (Dokl. Akad. Nauk. SSSR,
1963, No. 1043-1047). ~~... ..~~ aliphatic sulphides three;
 $KIO_4 + 2R_2S + 2HCl = 2R_2SO_2 + KCl + ICl + H_2O$, and is used in
90% AcOH to titrate sulphides potentiometrically, when dissolved
in 34% dibutyl phthalate-80% acetic acid-5% water, 0.005N. in
ICl and 0.4N. in HCl; the error is $\pm 1\%$. R. C. MURRAY.

MITASOJ, A.S.

Adsorbability of organic sulfur compounds on silica gel.
A. T. Sivynoshenko and A. S. Nekrasov. Doklady Akad. Nauk S.S.S.R. 97, 85-86 (1954). Adsorption on silica gel of various org. S compds. dissolved in either petroleum fractions alone or in their blends with aromatic solvents was studied at 19-20° by using a chromatographic column. Generally, adsorption decreases with an increase in mol. wt. for the following types of S compds.: sulfide, disulfide, thiophene, thiophane, thiapyran, thianaphthene. This rule is followed strictly in the aliphatic series, but for cyclic compds. an increase in mol. wt. leads to increased adsorption if the mol. size is increased in terms of no. of rings; an increase in side-chain length does not have this effect. Branched-chain compds. are adsorbed less than their straight-chain analogs. Side chains generally reduce adsorption. Sulfides are adsorbed easier than disulfides, and thiapyran is less adsorbed than dithiapyran. Thianaphthene is adsorbed more than the aliphatic sulfides (cf. Haresnape, *et al.*, *C.A.* 64, 2314c).
G. M. Korolapoff

Nekrasov, A. S.

0003

✓ Thermocatalytic refining. A. S. Nekrasov and V. N. Karkhova. *Trudy Inst. Nefti, Akad. Nauk S.S.R.*, 6, 81-88 (1955). - The S content of gas oil can be reduced by 62% and of kerosine by 70% by treatment in the vapor phase at 420-50° and 110 atm. with a reduced Fe catalyst. Cracking takes place during desulfurization, and up to 60% of fractions with an end point of 300° are formed. A 2nd treatment of the reduced distillate in the presence of fresh catalyst does not result in further desulfurization, either in the liquid or vapor phase. The Fe catalyst removes aliphatic S compounds and those in which S is not part of the ring.

ghm LPH

NEKRASOV, A. S.

USSR/ Chemistry - Applied chemistry

Card 1/1 Pub. 116 - 13/24

Authors : Galaxina, R. S., and Nekrasov, A. S.

Title : Chlorination of n-hexane and n-heptane in vaporous phase

Periodical : Ukr. khim. zhur. 21/2, 222-226, 1955

Abstract : Study was made to establish the optimum reaction conditions prevailing during the chlorination of normal paraffinic hydrocarbons (n-heptane and n-hexane) warranting maximum yields of monochlorides. The importance of three major factors in the chlorination reaction: reaction temperature, ratio of reagents and volumetric rates of reacting substances, is explained. The results obtained at various chlorination temperatures are tabulated. Eight references: 5 USSR, 1 English and 2 German (1865-1951). Tables.

Institution : Acad. of Sc., Ukr. SSR, Crimean Branch

Submitted : September 6, 1954

NEKRASOV, A. S.

USSR/ Chemistry - Organic chemistry

Card 1/1 Pub. 116 - 9/50

Authors : Galanina, R. S., and Nekrasov, A. S.

Title : Thermal chlorination of petroleum n-octane and n-nonane

Periodical : Ukr. khim. zhur. 21/3, 331-334, June 1955

Abstract : Experiments on the chlorination of octane and nonane at temperatures close to the boiling point of monochlorides showed that the Cl selectively displaces a greater part of the hydrogen in second position. During chlorination in the vaporous phase at temperatures much higher than the boiling point of hydrocarbons and monochlorides, the Cl displaces the hydrogen atoms of first position. The secondary hydrogen atoms were found to be displaced at below boiling point temperatures. The effect of temperature increase on the hydrogen atom displacement is further explained. Seven references: 9 USSR, 1 English, 1 French, 1 USA and 1 German (1869-1953). Tables.

Institution : Acad. of Sc., USSR, Crimean Branch

Submitted : September 7, 1954

NEKRASOV, A.S.

Synthesis of thionyl chloride. E. A. Kuznetsov and A. S. Nekrasov, Zhur. Priklad. Khim. 25, 1012-13(1958)
A solution of 400 g. SO_2 in 200 ml. SOCl_2 was added slowly to 200 g. PbCl_2 ; after 6 hrs. refluxing, diln. with H_2O gave 98.5% crude or 95% pure SOCl_2 .
(PbCl_2), m. 51° (from petr. ether). The same method gave 95% in AcOH. G. M. Koslov

①

NEKRASOV, A.S.

USSR/ Chemistry - Thermal chlorination

Card 1/1

Pub. 22 - 24/60

Authors : Galenina, R. S., and Nekrasov, A. S.

Title : Activity of hydrogen atoms of various orientation during the chlorination of C₆ - C₉ n-alkanes

Periodical : Dok. AN SSSR 100/4, 701-703, Feb 1, 1955

Abstract : Experimental data are presented regarding the thermal chlorination of C₆ - C₉ n-alkanes. A close relation was established between the degree of Cl utilization and temperature and between the hydrocarbon surplus and the contact time of the reagents. The reaction temperature was found to be one of the factors affecting the rate of reaction as well as the orientation of the Cl atoms entering the molecule. The effect of temperature fluctuations on the rate of hydrogen atom substitution by Cl atoms is explained. It was found that a reduction in temperature below the optimum point is followed by a reduction in the activity of primary hydrogen and an increase in the activity of secondary ones. Five references: 3 USSR and 2 English (1936-1953). Tables; drawing.

Institution : Academy of Sciences, USSR, Petroleum Institute

Presented by : Academician A. V. Topchiev, June 1, 1954

NEKRASOV, A.S.

5

1956. SEPARATION OF SULPHUR COMPOUNDS WITH STANNIC CHLORIDE. 27
 Petrova, E.M. and Nekrasov, A.S. (Trud. Inst. Khim. (Izv. Akad. Nauk SSSR))
 (Ref. J. Chem., Moscow), 1956, vol. 8, 65-67; abstr. in Ref. Zh. Khim.
 no sulphur compounds from Tulaany kerosine (containing 0.7% sulphur) which
 acid, but removes up to 7% when it is heated. The precipitation of sulphur
 compounds from artificial mixtures in the form of complexes with stannic
 chloride was studied. The mixtures were produced by dissolving two sulphur
 compounds (chosen from dibenzylsulphide, diisobutylsulphide,
 dibenzylsulphide, dibenzylsulphide and thiophen) in desulfurized
 (dearomatized) Tulaany kerosine or in the aromatic portion of Karachudkar
 kerosine. The completeness of precipitation of complexes of sulphur
 compounds from mixtures decreases in the following order: cyclic sulphide,
 aliphatic-aromatic sulphide, aliphatic-aromatic disulphide, aliphatic
 sulphide, aliphatic disulphide. There was obtained a complex of
 dibenzylsulphide with stannic chloride that has not been described
 previously.

fra out

NEKRASOV, A. S.

7 7 4
Some regularities in thermal chlorination of n-dot-octane
B. S. Galina and A. S. Nekrasov. Proc. Acad. Sci.
U.S.S.R., Sect. Chem. 100, 27-3 (1956) (English trans-
lation). See C.A. 50, 14502c. B. A. R. 2

RM j

NEKRASOV, A.S.

Some regularities in thermal chlorination of *n*-dodecane.
 R. B. Galkina and A. S. Nekrasov (Crimean Boydan Acad.
 Sci. Ukr. S.S.R., Simferopol). *Dokl. Akad. Nauk*
 S.S.S.R. 106, 261-2 (1960). Thermal chlorination of *n*-
 dodecane performed under previously described conditions
 (cf. C.A. 50; 18994) was found to give 98.8% yield of mono-
 chloride at 280°, 96% at 260°, 80% at 250°, and 67% at
 240°, with progressive increase of the yield of dichlorides
 with decreased temp. Utilization of Cl was 100% at 200-
 300°, but declined rapidly at lower temps. The yield of
 monochloride is 68.5% with 10-fold excess of RH in the re-
 action, 98% with 8-fold excess, and 95% with 4-fold excess;
 the yield of dichloride rises from 1.5% to 5% in this sequence.
 At low feed rates of 15-16 l./l. hr., the monochloride reacts
 further with Cl, but at feed rates above 25 l./l. hr., the con-
 tact time is too short and yields drop. The best space
 velocity is about 25 l./l. hr. Fractionation of the mono-
 chlorides gave 1-C₁₁H₂₃Cl, b. 241-4°, and secondary chlo-
 rides, b. 231-5°. The relative reactivity of primary H
 atoms is 3.08 in comparison with secondary H atoms.
 G. M. Kosolapoff

Chem 2 5
 cm

MEKRASOV, A.S.; PTITSYNA, N.V.

Aromatic hydrocarbons from kerosene fraction of Crimean petroleum.
Trudy inst. nefi. 10:74-91 '57. (MIRA 11:4)
(Crimea--Kerosene) (Hydrocarbons)

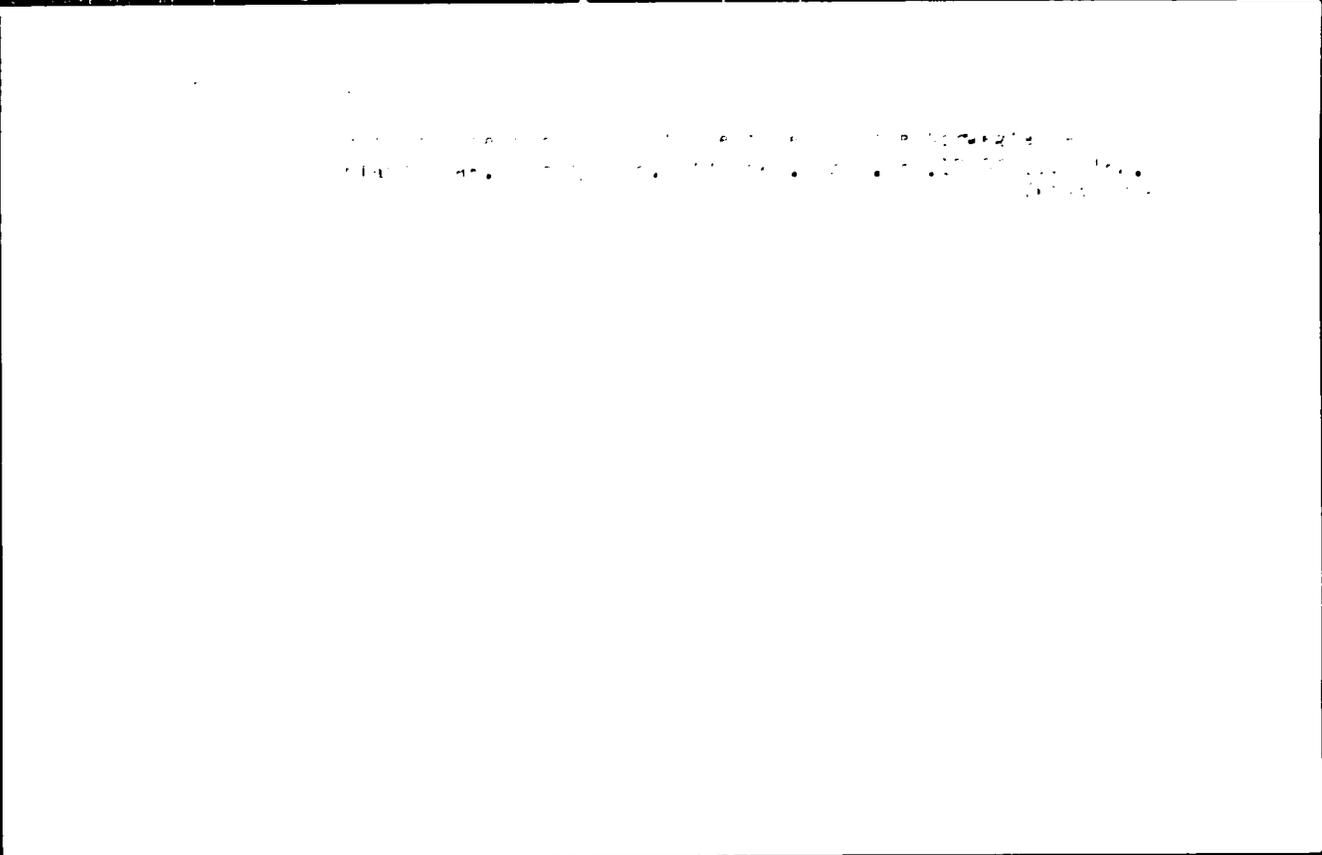
~~NEKRASOV, A.S.;~~ KARICHEVA, V.N.

Catalytic addition of hydrogen chloride to ethylene in the gas phase.
Trudy Inst.nefti 12:276-280 '58. (MIRA 12:3)
(Ethylene) (Hydrochloric acid) (Catalysis)

GAL'PERN, G.D.; KARICHEVA, V.N.; NEKRASOV, A.S.

Selection of adsorbents for the chromatographic separation of
concentrates of sulfur compounds and aromatic hydrocarbons. *Khim.
sera-i azotorg.sod.v nefteprod.* 3:219-226 '60. (MIRA 14:6)

1. Institut neftekhimicheskogo sinteza AN SSSR.
(Adsorbents) (Sulfur organic compounds) (Hydrocarbons)



L 06103-67 EWT(1) GW
ACC NR: AP6019515 (N)

SOURCE CODE: UR/0362/66/002/002/0174/0182

AUTHOR: Kagan, B. A.; Nekrasov, A. V.; Tamsalu, R. E.

ORG: Leningrad Hydrometeorological Institute (Leningradskiy gidrometeorologicheskii institut)

TITLE: The influence of horizontal turbulent friction on tidal fluctuation at sea level

SOURCE: AN SSSR. Izvestiya. Fizika atmosfery i okeana, v. 2, no. 2, 1966, 174-182

TOPIC TAGS: hydrometeorology, turbulent flow, ocean current, ocean dynamics, ocean tide

ABSTRACT: A study is made of the influence of horizontal turbulent exchange on tidal fluctuations in the level of the Yellow Sea. It is established that a consideration of the horizontal turbulent exchange can be used to introduce a considerable degree of correction into calculated tide levels. Consideration of horizontal turbulent flow will not, however, lead to a basic change in tidal phenomena calculated for the Yellow Sea. Analysis of the results shows that the amphidromic points of the waves are displaced toward the center of the basin when horizontal turbulent exchange is considered. This causes the amplitudes of tide in the central portions of the basin to decrease, while tidal amplitudes at the northern and southern ends increase.

UDC: 551.466.7

Card 1/2

L 06103-57
ACC NR: AP6019515

Horizontal turbulent exchange causes a smoothing of transverse curvature. The influence of horizontal turbulent exchange leads to a reduction in the effect of depth variability. Orig. art. has: 5 formulas, 6 figures, and 1 table.

SUB CODE: 08/ SUBM DATE: 11May65/ ORIG REF: 005/ OTH REF: 007

Card 212 LC

ACC NR: AM6032642

(A)

Monograph

UR/

Мил', Михаил Леонт'евич; Некрасов, Андрей Владимирович; Браверман, Александр Самойлович; Гродко, Лев Наумович; Лейканд, Матвей Abramovich

Helicopters; design and construction. v. 1: Aerodynamics (Vertolety; raschet i proyektirovaniye. t. 1: Aerodinamika). Moscow, Izd-vo "Mashinostroyeniye", 1966. 454 p. illus., biblio. Errata slip inserted. 4800 copies printed.

TOPIC TAGS: helicopter, aerodynamics, rotary wing aircraft, helicopter rotor, helicopter rotor blade, mechanical vibration, helicopter design

PURPOSE AND COVERAGE: This is Book One of a three-book series on helicopters. Book Two is on Vibrations and Dynamic Stability, and Book Three is on Planning. The book is intended for engineers of design bureaus, for scientific workers, and for fellows and instructors of higher educational institutions. It can also be of use to engineers of helicopter-building plants and students studying aerodynamics and helicopter stability. Many parts of the book will also be useful to flight and technical personnel in helicopter flying units. The book discusses the course of helicopter development, principles of their design, and their place among other aircraft not requiring airports. Various theories on rotors are covered, along with methods for determining their aerodynamic characteristics, including: the pulse theory of an ideal rotor and its application to the energetic method of calculation; the classic theory, in the case where numerical integration methods are used; the vortex theory; and methods of experimentally determining a rotor's characteristics during flight tests and in wind tunnels. There is a

Card 1/4

UDC: 629.135.4:533.6.001.12

ACC NR: AM6032642

detailed discussion of the various methods for the aerodynamic calculation of the helicopter and the theory of rotor flutter. Methods are explained for calculating flutter while hovering and in forward flight. Special attention is devoted to the calculation of friction in the hub's feathering hinges and to the transmission of blade vibrations through the automatic pitch control. Experimental research on flutter is described. The authors express gratitude to engineers F. L. Zarzhevskaya, R. L. Kreyer, and L. G. Rudnitskiy for their help in preparing the manuscript, and to R. A. Mikheyev for his review. There are 42 references, 35 of which are Soviet.

TABLE OF CONTENTS (Abridged):

Foreword - 3

Basic symbols - 5

Ch. 1. Lines of helicopter development and basic principles of their design - 7

1. Development of helicopter building - 9

2. Helicopter as compared to transport VTOL's and STOL's - 21

3. Basic design principles - 37

Ch. 2. Rotor aerodynamics - 47

1. Theory of rotor development and methods of experimentally determining its characteristics -

Card 2/4

ACC NR: AM 000 000

2. Classic theory of a rotor with hinged blade connection. General case. Curvilinear motion - 58
3. Rotor pulse theory - 138
4. Classic rotor theory. Numerical integration theory - 174
5. Vortex rotor theory - 210
6. Experimental determinations of the aerodynamic characteristics of a rotor - 237
7. Quality and the propulsion coefficient of rotor efficiency - 253
8. Calculating rotor characteristics for hovering and vertical flight (Propulsion theory of rotors) - 265
- Ch. 3. Aerodynamic calculation of helicopter - 280
 1. Basic equations for the aerodynamic calculation of a helicopter - 280
 2. Helicopter aerodynamic calculation by the Mil'/Yaroshenko method - 293
 3. General method for the aerodynamic calculation of rotary-winged aircraft - 301
 4. Helicopter aerodynamic calculation using the concepts of rotor quality and efficiency - 323
 5. Helicopter aerodynamic calculation by the forces method - 343
- Ch. 4. Rotor flutter - 351
 1. Basic assumptions and peculiarities of the approach to flutter calculation - 352
 2. Flywheel flutter of the isolated blade during axial flow around the rotor - 358
 3. Calculating friction during flutter - 376
 4. Rotor flutter with relation to the transmission of blade vibration through the automatic pitch control - 382

Card 3/4

ACC NR: AM6032642

5. Flywheel flutter of the rotor in forward flight - 391
6. Calculation of flutter, considering blade flexure and torsion - 396
7. General method for calculating the flutter and torsion in a rotor in flight - 418
8. Experimental studies of flutter - 433

References - 449

SUB CODE: 01/ SUBM DATE: 04Mar66/ ORIG REF: 033/ OTH REF: 009/

Card 4/4

KOLYANDR, L.Ya.; PUSTOVIT, Yu.A.; SORKIN, M.M.; NEKRASOV, A.Ya.;
MIKHNO, S.I.

Discussing the article "Removal by adsorption of carbon disulfide in the preparation of high-purity benzene" by V.E.Privalov, A.P.Kolesov, V.Z.Sokolov ("Koks i khimiia," no.2, '62) and of the article "Preparation of sulfur-free benzene from pure benzene by means of chemical purification methods ("Koks i khimiia," no.3, '62) by V.E.Privalov, T.A.IAroslavskaya, N.Kh.Cherkasov, and I.A.Levantovich. Koks i khim. no.2:62-63 '64. (MIRA 17:4)

1. Ukrainskiy uglekhimicheskiy institut (for Kolyandr, Pustovit).
2. Bagleyskiy koksokhimicheskiy zavod (for Sorkin, Nekrasov, Mikhno).

NEKRASOV, B.

Return to earth. Nauka i shytia 12 no.9:5-6 3 '62. (MIRA 16:1)
(Astronautics)

1966. The following information was obtained from the file:

Hydrogen cyanide is a colorless, odorless, highly toxic gas.

It is used in the manufacture of plastics, dyes, and other chemicals.

ACC NR: AP7003005 (A) SOURCE CODE: UR/0413/66/000/012/0112

INVENTOR: Nekrasov, B. B.; Polyushkov, A. G.; Badikov, G. I.

ORG: none

TITLE: Starter system for an aircraft engine. Class 62, No. 189691. Announced by Air Force Engineering Academy im. Prof. N. E. Zhukovskiy (Voenno-Vozdukhnaya i Inzhenernaya akademiya)

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 24, 1966, 112

TOPIC TAGS: aeronautics, engine starter system, hydraulic pump, hydraulic equipment

ABSTRACT: An Author Certificate has been issued for an aircraft engine starter system comprising: a hydraulic pump and motor connected respectively to the engine and generator shafts; pipe line system with a coupling for connecting to the aircraft or airfield hydraulic power system. In order to maintain the rotation of the generator shaft in the same direction at the transition from start to power generation regime, the pump and motor are connected by conduits to the input coupling successively, though the entry section of the pipe system is provided with check and bypass valves (see Fig. 1). Orig. art. has: 1 figure.

Card 1/2

UDC: 629.13.01/06

ACC NR: AP7003005

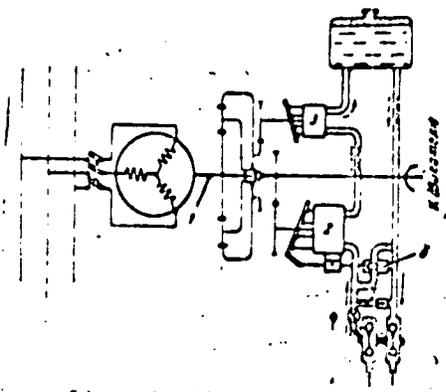


Fig. 1.

- 1 - Generator shaft; 2 - hydraulic pump;
- 3 - hydraulic motor; 4 - intake connector;
- 5 - check valve; 6 - bypass valve.

SUB CODE: 017/1/SUBM DATE: 11Sep64/

Card 2/2

ACC NR: AP7003004

(A)

SOURCE CODE: UR/0413/0070

INVENTOR: Nekrasov, B. B.; Polyushkov, A. G.; Badikov, G. I.

ORG: none

TITLE: Starter system for an aircraft engine. Class 62, No. 1890. [Patented by Air Force Engineering Academy im. Prof. N. E. Zhukovskiy (Voyenno-vozdukhnaya inzhenernaya akademiya)]

SOURCE: Izobreteniya, promyshlennyye obratzy, tovarnyye znaki, no. 11, 1966, 111-112

TOPIC TAGS: ~~engines~~, engine starter system, hydraulic pump, hydraulic equipment

aircraft engine
ABSTRACT: An Author Certificate has been issued for a hydraulic starter system for aircraft engine comprising: hydraulic pump and compressor connected to the engine and generator shafts by means of a gear drive; brake mechanism on the generator shaft; and pipe line system with couplings for connecting to aircraft or airfield hydraulic power system. In order to boost the power during the starting operation, the pump and motor are connected in parallel to the intake coupling by means of a three-way valve, though the conduits interconnecting the pump and motor are provided with cutoff valves (see Fig. 1). Orig. art. has: 1 figure.

Card 1/2

JDC: 629.13.01/06

ACC NR: AP7003004

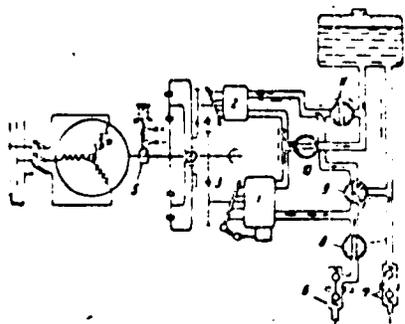


Fig. 1.

1 - Hydraulic pump; 2 - hydraulic motor;
3 and 4 - gears; 5 - brake mechanism;
6 and 7 - couplings; 8 to 11 - valves.

SUB CODE: 0,1/3 SUBM DATE: 11Sep64/

Card 2/2

L 21704-65 EWT(1)/EWP(m)/EWJ(k)/EWJ(s)-2/FA/EPF(n)-2/T-2 Pd-1/PF-1 TT/WW

ACCESSION NO. AM930323

BOOK EXPLOITATION

4
34
33
64

Author: [unclear] Moscow, Press [unclear], 1977. 7. 027 p. Translation of Gidravlika.

TOPIC TERM: aerostatic engineering, hydraulics, fluid mechanics, hydrostatic pressure, Bernoulli equation, fluid flow, flow research, pipe flow, aircraft hydraulic actuating equipment.

PURPOSE AND COVERAGE: This textbook, originally written for aeronautical engineering students, also presents the main general hydraulic problems as well as fundamentals of the theory of hydraulic machinery employed in aircraft systems. The practical applications of hydraulic theory being the author's main concern, the book contains many worked problems for simple hydraulic systems and machinery. One hundred and seventy-eight drawings and diagrams illustrate the principles and their practical applications discussed in the book.

TABLE OF CONTENTS (abridged)

Notation and Abbreviations - - 9

Card 1/5

L 2470-65

ADDRESS: No. 00000000

Ch. I. Introduction

1. The subject of hydraulics -- 11
2. Historical background -- 13
3. Forces acting on a fluid. Pressure -- 17
4. Properties of liquids -- 18

Ch. II. Hydrostatics

5. Hydrostatic pressure -- 25
6. The basic hydrostatic equation -- 27
7. Pressure head (vacuum, pressure measurement) -- 28
8. Fluid pressure on a plane surface -- 33
9. Fluid pressure on cylindrical and spherical surfaces. Buoyancy and floatation -- 36

Ch. III. Relative rest of a liquid

10. Basic concepts -- 42
11. Liquid in a vessel moving with uniform acceleration in a straight line -- 43
12. Liquid in a uniformly rotating vessel -- 44

Ch. IV. The basic equations of hydraulics

13. Basic concepts -- 49
14. Rate of discharge. Equation of continuity -- 51
15. Bernoulli's equation for a stream tube of an ideal liquid -- 52
16. Bernoulli's equation for real flow -- 57
17. Loss losses (general considerations) -- 60