"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7

ANDRUSHCHENKO, A.G.; BEREZKINA, O.A.; KUZ'MINA, V.I.; OZEROVA, G.M.; PAL'CHIKOVA, A.P.; TSARIN, A.P.; TIMOFEYEV, L.N.; NIKITIN, G.A., krayeved; GARMASH, P.Ye., red.; FISENKO, A.T., tekhn. red.

[Alupka; an excursion sketch; its nature, history, sanatoriums, the palace-museum, its park, and an information directory] Alupka; ekskursionnyi ocherk: priroda, istoriia, zdravnitsy, dvorets-muzei, park, spravochnye svedeniia. Simferepol', Krymizdat, 1963. 78 p. (MIRA 16:10)

1. Nauchnyye sotrudniki Alupkinskogo dvortsa - muzeya (for all except Fisenko, Garmash).
(Alupka--Guidebooks)

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~~ANDRYUSHCHENKO, A. I.~~
ANDRYUSHCHENKO, A.I.

Jun 50

USSR/Electricity - Power, Steam
Heat Economy

"Some Ways of Saving Heat Energy in Power Installations of Enterprises," A. I. Andryushchenko, $1\frac{1}{2}$ pp

"Prom Energet" No 6

Indicates methods of using waste heat from small steam or Diesel installations, e.g., to heat feed water, in steam hammers, to warm air supplied to furnaces, etc.

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"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7

ANDRYUSHCHENKO, A. I.

ANDRYUSHCHENKO, A. I., Kand. Tekhn. Nauk Dots.

Odesskiy Gidrotekhnicheskiy Institut

Vybor Ratsional'noy skhemy Sovmestnoy Raboty

Rayonnykh Kotel'nykh i Tets. Page 46

SO: Collection of Annotations of Scientific Research Work on Construction, completed in 1950. Moscow, 1951

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7

ANDRYUSHCHENKO, A. I.

"On the utilization of the non-regulated extraction of steam for the purpose of heat supply," Industrial Energetics, 1951.

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7

Fuel Abstracts ANDRYUSHCHENKO, A.I. Steam Raising & Steam Engines M 11/1952

4710. SELECTION OF MOST ADVANTAGEOUS HEATING SURFACE FOR HEAT EXCHANGES USING BLED OR EXHAUST STEAM. - Andryushchenko, A.I, (Prom. Energ. (Industr. Pwr. Moscow), July 1952 12-14). Formulae are derived and an example is given of calculatio s for heating surface and steam pressure for preheaters, calorifiers, etc. (L)

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7

ANDRYUSHCHENKO, A.I., kand.tekhn.nauk

Methods for determining indicators of the thermodynamic effectiveness of processes in steam-power installations. Trudy Inst. tepl.AN URSR no.7:84-103 '52. (MIRA 13:5)
(Thermodynamics) (Steam engineering)

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7

ANDRYUSHCHENKO, A.I., kand.tekhn.nauk

Certain thermodynamic dependencies of processes in steam turbine installations. Trudy Inst.tepl.AN URSR no.10:65-72 '53. (MIRA 13:5)

(Steam turbines) (Thermodynamics)

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7

ANDRYUSHCHENKO, Anatoliy Ivanovich.

Academic degree of Doctor of Technical Sciences, based on his defense, 25 March 1955, in the Council of Moscow Order of Lenin Power Engineering Inst imeni Molotov, of his dissertation entitled: "Questions of the Thermodynamic Theory of Computation of Thermification Installations."

Academic degree and/or title: Doctor of Sciences

SO: Decisions of VAK, List no. 13, 4 June 1955, Byulleten' MVO SSSR, No. 15, Aug 56, Moscow, pp. 5-24, Uncl. JPRS/NY-537

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7

VUKALOVICH, Mikhail Petrovich; NOVIKOV, Ivan Ivanovich; ANDRYUSHCHENKO, A. I., redaktor; FRIDKIN, A.M., tekhnicheskiy redaktor.

[Technical thermodynamics] Tekhnicheskaia termodinamika. Izd. 2-oe, perer. Moskva, Gos.energ.izd-vo 1955. 336 p. (MLRA 9:1)
(Thermodynamics)

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7

ANDRYUSHCHENKO, A.I.

Subject : USSR/Engineering AID P - 1248

Card 1/1 Pub. 110-a - 9/17

Author : Andryushchenko, A. I., Kand. of Tech. Sci.

Title : The efficiency of superheating process steam in Central Heat and Electric Power Stations (TETs)

Periodical : Teploenergetika, 1, 37-40, Ja 1955

Abstract : By thermodynamic methods the expediency is analyzed of superheating the process steam in heat and power stations equipped with back pressure and extraction turbines. Some criteria are advanced which can determine in each case the question of the efficiency of superheating. Charts.

Institution : Moscow Power Institute

Submitted : No date

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"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7

ANDRYUSHCHENKO, A.I.

Subject : USSR/Electricity AID P - 1507

Card 1/1 Pub. 26 - 3/36

Author : Andryushchenko, A. I., Kand. of Tech. Sci.

Title : Limiting heating water temperature in the main water heater operated on bled steam

Periodical : Elek. sta., 3, 11-13, Mr 1955

Abstract : The author studies the problems of bled steam water heating in district heat-and-power plants. The water is heated by main and peak preheaters. The author derives equations to determine analytically the most efficient conditions for the operation of the system and in particular to determine the limiting temperature of heating water at which the peak preheater has to be included in operation.

Institution: None

Submitted : No date

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7

Translation from: Referativnyy zhurnal, Elektrotekhnika, 1958, Nr 1, p 19 (USSR) SOV/112-58-1-163

AUTHOR: Andryushchenko, A. I.

TITLE: Influence of Feed-Water Temperature on Boiler Efficiency (Zavisimost' k. p. d. proyektiruyemogo kotloagregata ot temperatury pitatel'noy vody)

PERIODICAL: Sb. nauchn. soobshch. v pomoshch' prom-sti, Saratovsk. avtomob.-dor. in-t, 1956, Nr 4, pp 32-35

ABSTRACT: For each value of feed-water temperature (t_{fw}), there is a definite difference between the feed-water temperature and that of flue gases. An increase in feed-water temperature by Δt_{fw} results in an increase in t_{fg} by

$$\Delta t_{fg} = \frac{3(1-\Psi)}{2\Psi+3}\Delta t_{fw} \qquad \text{where } \Psi = \frac{V_a C_a}{V_g C_g}$$

$V_a C_a$ and $V_g C_g$ are products of the reduced volume by the average heat capacity of air and gases, respectively. Increase in heat losses q_2 will be:

$$\Delta q_2 = 100 \frac{V_g C_g}{Q_h^p} \cdot \frac{3(1-\Psi)}{2\Psi+3}\Delta t_{fw} = 100 \xi \Delta t_{fw} \ \%$$

Card 1/2

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"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7

SOV/112-58-1-163

Influence of Feed-Water Temperature on Boiler Efficiency

The decrease in boiler installation efficiency is $\eta = -\xi\Delta t_{fw}$. The value of factor ξ can be found more accurately by a few alternate engineering and economic calculations of the boiler at different t_{fw} and at a given fuel. Real values of ξ for various fuels and air suctions are from 0.0001 to 0.0002, whence approximately $\eta = (0.1 \rightarrow 0.2)10^3\Delta t_{fw}$, i.e. with a t_{fw} increasing by 100° C the boiler efficiency will possibly decrease by 1-2%. The decrease in boiler efficiency with the increase of feed-water temperature can be eliminated by increasing Ψ up to 1 by drying the fuel and diminishing undesirable suctions, by dividing gas and feed-water flows, by replacing gas with steam in air preheating, and by other means.

P.I.A.

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1. Boilers--Performance 2. Feed water--Thermal effects 3. Mathematics

Card 2/2

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7

ANDRYUSHCHENKO, A.I., doktor tekhnicheskikh nauk, professor.

Calculation of optimum steam pressure in waste-heat boilers. Prom.energ. 11 no.5:16-17 My '56. (MLRA 9:9)
(Boilers)

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7

SOV/112-57-9-18357

Translation from: Referativnyy zhurnal, Elektrotekhnika, 1957, Nr 9, p 32 (USSR)

AUTHOR: Andryushchenko, A. I.

TITLE: Regulation of Steam-Turbine Plants by Varying Steam Pressure at Boilers (O regulirovanii paroturbinnykh ustanovok izmeneniyem davleniya para u kotlov)

PERIODICAL: Tr. Saratovsk. avtomob.-dor. in-ta, 1956, sb. 14, pp 370-376

ABSTRACT: As high-power hydroelectric stations cannot operate economically under variable load conditions nor high-power heating-and-electricity central stations work economically at variable electric load, peak loads of a power system should be taken by thermal condensation-type stations. VTI investigations have shown that with considerable load changes (within 50% of the rated load), nozzle regulation of the turbines results in considerable temperature irregularities in various parts of the same stage, and results in lower efficiency of all other stages. According to the author, the best method of regulation of turbines operating under abruptly changing loads is throttle regulation, which excludes all irregularities and preserves optimum speeds and pressure differences in all

Card 1/2

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"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7

112-57-8-16275

Translation from: Referativnyy zhurnal, Elektrotekhnika, 1957, Nr 8, p 34 (USSR)

AUTHOR: Andryushchenko, A. I.

TITLE: On the Optimum Calculated Temperature of System Water Undergoing a Multistage Heating at a Heating-and-Electric Station (O naivygodneyshey raschetnoy temperature setevoy vody pri yeye mnogostupenchatom nagreve na TETs)

PERIODICAL: Tr. Saratovsk. avtomob.-dor. in-ta (Transactions of the Saratov Automobile-and-Highway Institute), 1956, Nr 14, pp 377-399

ABSTRACT: Noted is the importance of selection of the calculated temperature of system water undergoing a multistage heating at a heating-and-electric station. Relationships between the annual consumption in the system and the calculated water temperature for 2-pipe and 1-pipe heating networks are determined. The unknown parameter is determined on the basis of minimum annual expenses. An example of a solution to the problem is given, and the effect of various factors on the optimum temperature drop is examined.

M. L. Z.

Card 1/1

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"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7

TITLE: Computing the optimum pressure in a blow-down water flash-box (expander) (Raschet optimal'nogo davleniya v rasshirite produvochnoy vody)

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CARD 2/2

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"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7

SOV/112-59-5-8580

8(6)

Translation from: Referativnyy zhurnal. Elektrotekhnika, 1959, Nr 5, p 25 (USSR)

AUTHOR: Andryushchenko, A. I., Kin, E. A., and Il'in, A. V.

TITLE: Methods for Thermodynamic Design of the Optimum Parameters of the Heat Scheme of High-Power Reheating-Type Steam Turbines

PERIODICAL: Nauchn. soobshch. Saratovsk. avtomob.-dor. in-t, 1957, Nr 10, p 79, ill.

ABSTRACT: With specified initial steam parameters, reheating temperatures, and condenser pressure, the choice of optimum thermal layout depends on the selection of optimum reheat-steam pressure, regenerative feed-water heating, the number of reheaters, and the heating distribution among them. Analytical formulae are presented which are derived from the first and second thermodynamics laws; the working capacity of heat and the working agent are determined, as well as heat losses in the actual irreversible processes. These formulae permit selecting an optimum ratio between the parameters in question,

Card 1/2

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SOV/112-59-5-8580

Methods for Thermodynamic Design of the Optimum Parameters of the Heat . . . .

e.g., between the feed-water temperature, the pressure, and the number of reheating stages. After the thermodynamically optimum solution has been found, alternate calculations of the thermal layout should be made if necessary.

S.A.P.

Card 2/2

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"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7

ANDRYUSHCHENKO, A.I., doktor tekhn. nauk, prof.

Air preheating in steam powered installations of supercritical parameters. Izv. vyc. ucheb. zav.; energ. no.4:67-71 Ap '58. (MIRA 11:6)

1. Saratovskiy avtomobil'no-dorozhnyy institut.
(Boilers--Air preheating)

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"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7

SOV/96-58-5-12/27

AUTHOR: Andryushchenko, A.I., Doctor of Technical Sciences

TITLE: Calculation of the Limiting Temperature of Regenerative Heating of Feed-water (Raschet predel'noy temperatury regenerativnogo podogreva pitatel'noy vody)

PERIODICAL: Teploenergetika, 1958, Nr 5, pp 57 - 61 (USSR)

ABSTRACT: Above a certain limit, additional regenerative heating of feed-water confers no added benefit; this article sets out to determine that limiting temperature. Expressions are derived for the capacity for work of live steam and of steam taken from turbine tapping. Beyond a certain limit, additional tapping of steam gives rise to additional losses. Decisive factors in determining the highest temperature of regenerative heating of feed-water are the actual power consumption to drive the feed pumps and the relationship between the heat lost in the outgoing flue gases and the feed-water temperature. Thus, under actual conditions, there is a limiting tapping pressure at which the fuel economy resulting from regenerative heating of feed-water by steam from the tapping is zero. This limiting pressure does not depend on the positions of the lower tappings. The limiting feed-water temperature is that which the feed-water would have if it were heated by steam from the limiting tapping, although, of course, in actual systems this tapping is not used

Card1/3

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SOV/96-58-5-12/27

Calculation of the Limiting Temperature of Regenerative Heating of Feed-water

as it gives no advantage.
The limiting temperature of water is then calculated for an installation without reheat, and an expression is obtained for the limiting temperature of regenerative heating of feed-water. Since many of the terms in this expression depend on the answer, a method of successive approximation must be used. Thermodynamically, the optimum temperature of regenerative heating will be obtained from a tapping some 25 - 30 °C lower than the critical value. A procedure for determining the optimum in practical systems is described, with allowance for the effects on capital investment in the station as a whole. As an example, the best temperature of regenerative heating of feed-water calculated in this way for a turbine type VK-100 is about 205 - 210 °C, the limiting temperature being 234 °C. If the feed-water temperature is assumed to have no influence on the flue-gas temperature, the limiting temperature is 276 °C with the optimum at about 245 °C.
The modifications that must be made in the formulae when reheat is used are then given. The limiting and best temperatures are

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Calculation of the Limiting Temperature of Regenerative Heating of Feed-water

somewhat higher in this case. For example, the limiting temperature of regenerative feed-water heating is 284 °C for a turbine type SVK-200 operating at a stop valve steam pressure of 220 atm. and temperature of 600 °C with reheat to 565 °C at 34 atm.
It is concluded that the method of calculation should be very useful in analysing new circuits of power equipment.
There are 1 figure and 1 Soviet reference

ASSOCIATION: Saratovskiy avtomobil'no-dorozhnyy institut (Saratov Highway Institute)

Card 3/3

1. Feed water--Heating 2. Steam--Effectiveness 3. Mathematics --Applications

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7

ANDRYUSHCHENKO, A.I., prof.doktor tekhn.nauk; KIN, E.A., inzh.

Intermediate superheating of steam in heat producing installations. Izv. vys.ucheb.zav.; energ. no.12:69-77 D '58. (MIRA 12:3)

1. Saratovskiy avtomobil'no-dorozhnyy institut.
(Heat engineering)

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"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7

ANDRYUSHCHENKO, A.I., prof., doktor tekhn. nauk; LAPSHOV, V.N., inzh.

Raising the economy of active medium pressure steam turbine power plants by installing gas turbines according to the combined cycle. Izv. vys. ucheb. zav.; energ. 2 no.10:43-49 O '59. (MIRA 13:3)

1. Saratovskiy avtomobil'no-dorozhnyy institut. Predstavlena kafedroy teploenergetiki.
(Steam turbines) (Electric power plants)

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7

BUTAKOV, I.N., doktor tekhn.nauk, prof.; ANDRYUSHCHENKO, A.I., doktor tekhn.nauk, prof.; KRACHKOVSKIY, N.N., kand.tekhn.nauk

In reference to the discussion on optimum steam parameters and characteristics of heat-transfer equipment. Energomashinostroenie 5 no.3: 19-22 Mr '59. (MIRA 12:3)

(Heat engineering)

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7

ANDRYUSHCHENKO, A.I., prof., doktor tekhn.nauk

Effect of economic factors on the selection of parameters of the regenerative bleeding in steam-turbine units. Trudy SADI no.16 pt.1:146-155 '59. (MIRA 13:11)

(Steam turbines)

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7

ANDRYUSHCHENKO, A.I., doktor tekhn.nauk, prof.

Efficient arrangement of cycles of condensation steam turbine plants. Izv.vys.ucheb.zav.; energ. 3 no.6:67-72 Je '60. (MIRA 13:6)

1. Saratovskiy politekhnicheskiy institut. Predstavlena kafedroy teploenergetiki.

(Steam turbines)

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7

ANDRYUSHCHENKO, A.I., doktor tekhn.nauk

Calculating the operating pressure limits for upper regenerative steam extraction at thermal electric plants. Teploenergetika 7 no.5:61-64 My '60. (MIRA 13:8)

1. Saratovskiy politekhnicheskiy institut.
(Steam engineering) (Steam power plants)

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7

ANDRYUSHCHENKO, A.I., doktor tekhn.nauk, prof. ; KHLEBALIN, Yu.M., inzh.

Choice of initial steam parameters for industrial heat and electric power plants. Izv. vys. ucheb. zav.; energ. 3 no. 9:53-60 S '60. (MIRA 13:9)

1. Saratovskiy politekhnicheskiy institut. Predstavlena kafedroy promyshlennoy teplotekhniki.
(Electric power plants) (Heating from central stations)

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7

ANDRYUSHCHENKO, A.I., doktor tekhn.nauk; LAPSHOV, V.N., inzh.

Effective cycles of combined gas-steam units. Teploenergetika 7 no.9:60-62 S '60. (MIRA 14:9)

1. Saratovskiy politekhnicheskiy institut.
(Turbines)

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7

ANDRYUSHCHENKO, A.I., doktor tekhn.nauk, prof.

Prospects for the development of steam and gas systems. Izv. vys. ucheb. zav.; energ. 4 no.1:54-58 Ja '61. (MIRA 14:2)

1. Saratovskiy politekhnicheskiy institut.
(Turbines)

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7

ANDRYUSHCHENKO, A.I., doktor tekhn.nauk, prof.; TSEDERBERG, N.V., doktor tekhn.nauk, prof.

Problems concerning research in the field of thermal electric power production. Izv. vys. ucheb. zav.; energ. 4 no.10:52-55 O '61. (MIRA 14:11)

1. Saratovskiy politekhnicheskiy institut (for Andryushchenko).
2. Moskovskiy ordena Lenina energeticheskiy institut (for TSederberg).
(Steam power plants)

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7

ANDRYUSHCHENKO, A.I., doktor tekhn.nauk; POLYAKOV, G.M., kand.tekhn. nauk.

"Thermodynamics in engineering," by A.S. IAstrzhembsii. Reviewed by A.I. Andriushchenko, G.M. Poliakov. Teploenergetika 8 no.7:95 Jl '61. (MIRA 14:9)

(Thermodynamics)
(IAstrzhembsii, A.S.)

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7

ANDRYUSHCHENKO, A.I., doktor tekhn.nauk; LAPSHOV, V.N., kand.tekhn.nauk

Efficiency cycles and systems of combined gas and steam district heating plants. Teploenergetika 8 no.11:13-18 N '61. (MIRA 14:10)

1. Saratovskiy politekhnicheskiy institut.
(Heating from central stations)

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7

ANDRYUSHCHENKO, A.I., doktor tekhn.nauk, prof.; ZMACHINSKIY, A.V., inzh.

Calculation of the optimum temperature of the exhaust gases of electric power plant boilers. Izv. vys. ucheb. zav.; energ. 5 no.1:57-68 Ja '62. (MIRA 15:2)

1. Saratovskiy politekhnicheskiy institut.
(Boilers)

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7

ANDRYUSHCHENKO, Anatoliy Ivanovich, prof.; KHRUSTALEVA, N.I., red.; VORONINA, R.K., tekhn. red.

[Thermodynamic calculations of the optimum parameters for thermal electric power plants] Termodinamicheskie raschety optimal'nykh parametrov teplovykh elektrostantsii. Moskva, Gos.izd-vo "Vysshaia shkola," 1963. 229 p. (MIRA 16:8)
(Electric power plants) (Thermodynamics)

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7

ANDRYUSHCHENKO, A.I., doktor tekhn.nauk, prof; KHLEBALIN, Yu.M., inzh.

Calculation of economically optimum initial steam pressures for systems with backpressure. Izv. vys. ucheb. zav.; energ. 6 no.4: 64-70 Ap '63. (MIRA 16:5)

1. Saratovskiy politekhnicheskiy institut. Predstavlena kafedroy teploenergetiki.
(Steam turbines) (Electric power plants)

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7

ANDRYUSHCHENKO, A.I., doktor tekhn. nauk; LAPSHOV, V.N., kand. tekhn. nauk; KURNOSOV, A.T., inzh.; YARMAK, L.N., inzh.

Effectiveness of regenerative feed-water heating in waste-heat boilers. Teploenergetika 10 no.8:29-33 Ag '63. (MIRA 16:8)

1. Saratovskiy politekhnicheskiy institut.
(Boilers)

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7

ANDRYUSHCHENKO, A.I., doktor tekhn.nauk, prof.; POLYAKOV, G.M., kand. tekhn.nauk, dotsent

Review of A.I.Veinik's book "Thermodynamics." Izv.vys.ucheb.zav.; energ. 7 no. 4:111-114 Ap '64. (MIRA 17:5)

1. Saratovskiy politekhnicheskiy institut.

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7

ANDRYUSHCHENKO, A.I., doktor tekhn. nauk, prof.; KHLEBALIN, Yu.M., kand. tekhn. nauk

Use of an efficiency technique for calculating economically optimum parameters of initial steam. Teploenergetika 11 no.5:71-74 My'64. (MIRA 17:5)

1. Saratovskiy politekhnicheskiy institut.

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7

ANDRYUSHCHENKO, A.I., doktor tekhn. nauk

Calculation of optimum vacuum in the calculation of a steam turbine system. Sbor. nauch. soob. SPI no.17:3-13 '62. (MIRA 17:6)

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7

AFANRYUSHCHENKO, A.I., doktor tekhn. nauk; KHLEBALIN, Yu.M., inzh.

Thermodynamic calculation of optimum initial pressure of counterpressure systems. Sbor. nauch. soob. SPI no.17:14-28 1962. (MIRA 17:6)

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7

ANDRYUSHCHENKO, A.I., doktor tekhn. nauk, prof.; LAPSHOV, V.N., kand. tekhn. nauk, dotsent; PONYATOV, V.A., inzh.; AMINOV, R.Z., inzh.

Thermodynamic calculation technique of the optimum parameters of the gas section of binary steam and gas systems. Izv. vys. ucheb. zav.; energ. 7 no.6:54-60 Je '64 (MIRA 17:8)

1. Saratovskiy politekhnicheskiy institut. Predstavlena kafedroy teploenergetiki.

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7

ANDRYUSHCHENKO, A.I., doktor tekhn. nauk, prof.; LAPSHOV, V.N., kand. tekhn. nauk, dotsent; PONYATOV, V.A., inzh.; GORBACHEV, A.I., inzh.; VESELOV, B.N., inzh.

Choice of the optimal parameters for gas part of large steam gas units. Izv. vys. ucheb. zav.; energ. 7 no.11:39-46 N '64 (MIRA 18:1)

1. Saratovskiy politekhnicheskiy institut. Predstavlena kafedroy teploenergetiki.

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7

ANDRYUSHCHENKO, A.I., dokter tekhn. nauk, prof.; ANIKOV, A.S., inzh.

Determination of optimum parameters of the gas sections of steam and gas operated heat and electric power plants with intermediate air cooling by network water. Izv. vys. ucheb. zav.; energ. 7 no. 12:41-48 D '64. (MIRA 18:2)

1. Saratovskiy politekhnicheskiy institut. Predstavlena kafedroy teplosnergetiki.

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7

ANDRYUSHCHENKO, Anatoliy Ivanovich; LARIONOV, Vitaliy Nikolayevich; LOZHKIN, A.N., prof., dokter tekhn. nauk, retsenzent; OL'KHOVSKIY, G.G., red.

[Steam-gas systems of electric power plants; thermodynamic and technical economic analysis of operating cycles and thermal networks] Parogazovye ustanovki elektrostantsii; termodinamicheskii i tekhniko-ekonomicheskii analizy tsiklov i teplovykh skhem. Moskva, Energiia, 1965. 246 p. (MIRA 18:3)

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7

ANDRYUSHCHENKO, A.I., doktor tekhn.nauk, prof.; POLYAKOV, G.M., kand.tekhn. nauk, dotsent

Concerning A.I.Veinik's reply. Izv.vys.ucheb.zav.; energ. 8 no.3:117-118 Mr '65. (MIRA 18:4)

1. Saratovskiy politekhnicheskiy institut.

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L 3178-66 EPA/EWP(f)/EPF(n)-2/T-2/ETC(m) WW

ACCESSION NR: AP5011575 UR/0143/65/000/004/0045/0051
621.311.22

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B

AUTHOR: Andryushchenko, A. I. (Doctor of technical sciences, Professor); Lapshov, V. N. (Candidate of technical sciences); Popov, A. I. (Engineer); Saprykin, G. S. (Engineer)

TITLE: Efficiency of using superhigh temperatures in steam-gas plants with cooled gas turbines

SOURCE: IVUZ. Energetika, no. 4, 1965, 45-51

TOPIC TAGS: power plant, steam gas power plant, gas turbine

ABSTRACT: The effects of the air pressure, initial temperature of working gas, and cooling intensity upon the net electrical efficiency of a high-pressure-steam-generator plant and a waste-heat-boiler-type plant are determined. The calculations show that, with the compressor pressure ratios attainable today, a two-stage heat supply to high-temperature gas turbines is rather inefficient. It is

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found that: (1) The steam-gas plants with high-temperature gas turbines having initial gas temperatures of 1200—1400C and 1600C permit attaining net electrical efficiencies of 50—52% and 55—56%, respectively; (2) Such plants should have a simplest scheme which would make for their reliability and low cost; (3) The high electrical efficiency and low cost per kw of such plants make them most promising in the future development of power engineering. Orig. art. has: 7 figures and 1 formula.

ASSOCIATION: Saratovskiy politekhnicheskiy institute (Saratov Polytechnic Institute)

SUBMITTED: 07Sep64 ENCL: 00 SUB CODE: PR

NO REF SOV: 003 OTHER: 002

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"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7

KURNOSOV, V.T., inzh.; ANDRYUSHCHENKO, A.I., doktor tekhn. nauk, prof.; LAPSHOV, V.N., kand. tekhn. nauk, dotsent

Selection of the equations of state for the calculation of the parameters of water and steam using electronic computers. Izv. vys. ucheb. zav.; energ. 8 no.8:58-66 Ag '65. (MIRA 18:9)

1. Saratovskiy politekhnicheskiy institut (for Kurnosov, Andryushchenko). 2. Voronezhskiy politekhnicheskiy institut (for Lapshov). Predstavlena kafedroy teploenergetiki Saratovskogo politekhnicheskogo instituta.

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7

ANDRYUSHCHENKO, A.I., doktor tekhn. nauk, prof.

[illegible] and features of the [illegible] energetika [illegible] no. [illegible] F '[illegible]. ([illegible])

1. Saratovskiy politekhnicheskiy institut.

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7

ANDRYUSHCHENKO, A.I., doktor tekhn. nauk, prof.; LAPSHOV, V.N., kand. tekhn. nauk; PONYATOV, V.A., inzh., aspirant

Thermal effectiveness of steam and gas systems using the heat from intermediate air cooling in the steam portion. Teploenergetika 12 no.4:77-80 Ap '65. (MIRA 18:5)

1. Saratovskiy politekhnicheskiy institut.

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7

ANDRYUSHCHENKO, A.I., doktor tekhn. nauk; PONYATOV, V.A., inzh.

Increasing the efficiency of steam-gas systems by utilizing the exhaust gases for air heating. Teploenergetika 12 no.6: 66-69 Je '65. (MIRA 18:9)

1. Saratovskiy politekhnicheskiy institut.

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7

[illegible], A.I., doktor tekhn. nauk, prof.; AM[illegible], [illegible]

Choice of initial steam parameters of steam-gas central heating systems. Izv. vys. ucheb. zav.; energ. 9 no.[illegible] '66. (MIRA 19:1)

1. Saratovskiy politekhnicheskiy institut. Predstavlena kafedrey teploenergetiki. Submitted March 30, 1965.

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7

L 30251-66

ACC NR: AP6020165 SOURCE CODE: UR/0143/66/000/001/0037/0046

47
B

AUTHOR: Andryushchenko, A. I. (Doctor of technical sciences; Professor); Aminov, R. Z. (Engineer)

ORG: Department of Heat and Power Engineering, Saratov Polytechnic Institute (Kafedra teploenergetiki Saratovskiy politekhnicheskiy institut)

TITLE: Selecting the initial steam parameters for steam-and-gas heating installations

SOURCE: IVUZ. Energetika, no. 1, 1966, 37-46

TOPIC TAGS: heating engineering, heat transfer rate, equation of state, thermodynamic efficiency, cost estimate, air conditioning equipment

ABSTRACT: The use of the simplified equation of state suggested by M. P. VUKALOVICH and I. I. NOVIKOV (Uravneniya Sostoyaniya Real'nykh Gazov, GEI, 1948) makes it possible to derive sufficiently simple and accurate working formulas for determining the initial steam pressure p_1^{opt} for steam-and-gas heating installations. This is important from the standpoint of operating these installations at maximum efficiency. The calculations performed show that the optimal initial steam pressure for the elementary case of a back-pressure steam-and-gas heating installation without steam reheat can be determined as a function of the ratio between the flow rates of heat transfer agent in the gas and steam parts of the installation and of the minimum required expenditures. The methods of calculation presented may also be used for more complex heating

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systems. The calculations take into account such factors as the metal requirement for the economizers and superheater tube banks and headers and the unit cost of gas turbines, compressors, combustion chambers, heating surfaces, and regenerative preheaters as a function of initial pressure, proceeding from the assumption that every 39-bar increase in initial pressure is equivalent to a 7% increase in the cost of the steam turbine and feedwater pump. Orig. art. has: 6 figures, 26 formulas, and 1 table. [JPRS]

SUB CODE: 13 / SUBM DATE: 30Mar65 / ORIG REF: 009

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"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7

SERBIN, V.I.; BERESNEVICH, P.V.; ANDRYUSHCHENKO, A.V.; SAZONOV, V.A.; SHESTOKOV, M.M.

Experience in waste stacking in the zones of caving of operating mines. Gor. zhur. no.10:41-45 O '65. (MIRA 18:11)

1. Institut Krivbassproyekt (for Serbin, Beresnevich, Andryushchenko).
2. TSentral'nyy gornoobogatitel'nyy kombinat (for Sazonov, Shestakov).

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7

AND MOSHCHENKO, D. P.

33306. Karlikovoye rlodovodstvo. Vinodeliye i Vinogradarstvo Moldavii, 1949, No. 5, S. 47-48

SO: Letopis' Zhurnal'nykh Statey Vol. 45, Moskva, 1949

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7

ANDRYUSHCHENKO, D. P.

ANDRYUSHCHENKO, D. P.: "The cultivation of apples and pears on dwarf stock in Moldavia". Tbilisi, 1955. Min Higher Education USSR. Georgian Order of Labor Red Banner Agricultural Inst. (Dissertations for the Degree of Candidate of Agricultural Sciences)

SO: Knizhnaya letopis', No. 52, 24 December, 1955. Moscow.

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7

ANDRYUSHCHENKO, Dmitriy Petrovich; FITOVA, L., red.; KURMAYEVA, T., tekhn.red.

[Growing dwarf fruit trees] Kul'tura karlikovykh plodovykh derev'ev. Kishinev, Gos.izd-vo "Kartia moldoveniaske," 1961. 35 p. (Fruit culture) (MIRA 14:6)

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7

ANDRYUSHCHENKO, D.P., kand. sel'skokhoz. nauk

Dwarf fruit trees in Moldavia. Inform. biul. VINKH no.8:22 Ag '63. (MIRA 17:8)

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7"

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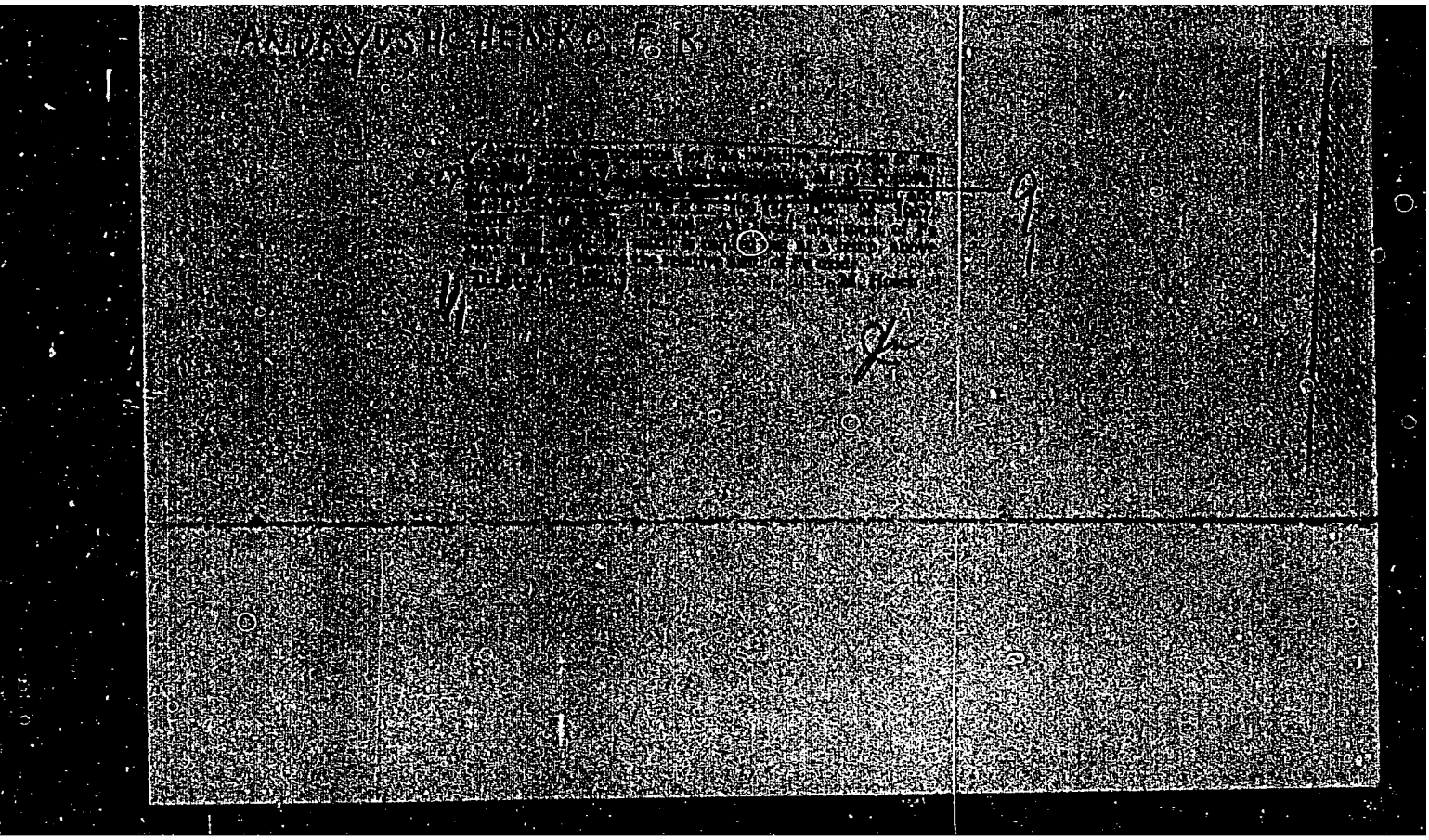

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"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7

5 (1, 2)

AUTHORS: Andryushchenko, F. K., Popova, M. G., Tulya, Ye. Ya.

SOV/153-2-2-15/31

TITLE: 1. Reduction Kinetics of Iron Oxide in the Presence of Iron Powder (O kinetike vosstanovleniya okisi zheleza v prisutstvii zheleznykh poroshkov)

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Khimiya i khimicheskaya tekhnologiya, 1959, Vol 2, Nr 2, pp 219-224 (USSR)

ABSTRACT: Since 1952 the method of the so called "reduction in solid phase" (Refs 1, 2) gained a leading position in the production of the active iron masses for the negative electrode of the alkaline accumulator. It is based on the reduction of iron oxide down to magnetic iron oxide in the presence of iron powders without the supply of oxygen. Before the theoretical fundamentals of this process were finally formulated and before its kinetic rule had been explained, numerous advantages of this method enforced its introduction into the working practice. Experts endeavored to explain these processes (Refs 3-8). If in the system here discussed, water steam, Fe_2O_3 and iron powder exist in amounts which do not exceed the stoichiometrical

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amount (for iron an amount that corresponds to $Fe + 4\ Fe_2O_3 \longrightarrow 3\ Fe_3O_4$), the powder is bound to be oxidized to Fe_3O_4 within a certain length of time. Iron oxide for its part, has to be reduced to Fe_3O_4 (Refs 7, 9). The present information gives experimental results for the purpose of explaining the above mentioned rules with a natural moisture content in iron. The average figures of the results obtained are shown in figure 1. The continuous line corresponds to heating, the interrupted line to cooling. The amount of moisture determined in the experiments just recently, were taken into consideration. The reduction method was applied with exclusion of air, in order to determine finally the rôle of water. Powder of electrolytic iron was used with $S = 695\ cm^2/g$ (according to Tovarov). The plant where the experiment was carried out is shown in figure 2. After an experiment of three hours duration, iron oxide (according to a chemical analysis) was completely reduced and the iron powder was oxidized. Figure 3 shows the Debye graphs. Further experiments served the purpose of

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"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7

1. Reduction Kinetics of Iron Oxide in the Presence of Iron Powder SOV/153-2-2-15/31

making the results applicable in working practice, and were carried out in air atmosphere. Cast iron powder was used. The table (p 223) shows the results. The reduction procedure is given. Figure 1 gives data on the phase composition of the reduced oxide in test II. Finally, the authors deal with a detailed explanation of the factors limiting or accelerating the reduction process of iron oxide in the presence of iron powder. Professor L. S. Palatnik collaborated in the analysis of the X-ray structure of the products. There are 4 figures, 1 table, and 10 references, 8 of which are Soviet.

ASSOCIATION: Khar'kovskiy politekhnicheskiy institut imeni V. I. Lenina; Kafedra tekhnologii elektrokhimicheskikh proizvodstv (Khar'kov Polytechnic Institute imeni V. I. Lenin; Chair of Technology of Electrochemical Products)

SUBMITTED: December 9, 1957

Card 3/3

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7

ANDRYUSHCHENKO, F.K.; POPOVA, M.G.; TULYA, Ye.Ya.

Kinetics of the reduction of iron oxide in the presence of iron powders. Part 2. Izv.vys.ucheb.zav.; khim.i khim.tekh. 4 no.1:108-115 '61. (MIRA 14:6)

1. Khar'kovskiy politekhnicheskiy institut imeni V.I.Lenina, kafedra tekhnologii elektrokhimicheskikh proizvodstv.
(Iron oxide) (Reduction)

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7

ANDRYUSHCHENKO, F.K.; CREKHOVA, V.V.; GONCHARCVA, Ye.I.; SHMORGUN, V.I.

Effect of the pH and buffer concentration on the stability of sodium hydrosulfite in solutions. Ukr. khim. zhur. 27 no.4:536-539 '61. (MIRA 14:7)

1. Nauchno-issledovatel'skiy institut osnovnoy khimii, Khar'kov.
(Sodium dithinite) (Hydrogen-ion concentration)

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7"

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24005
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D247/D305

AUTHORS: Andryushchenko, F.K., and Vlasenko, I.Ye.

TITLE: Certain electrochemical properties of titanium in solutions of hydrofluoboric acid

PERIODICAL: Zhurnal prikladnoy khimii, v. 34, no. 6, 1961, 1266

TEXT: Among the electrolytes recommended for use in applying titanium (Ti) coatings to metals or metal coatings to Ti is a group containing fluoride ions (F). The presence of F^- ions inhibits the formation of a passive film on Ti. An amount of HF in aqueous solution exceeding the critical concentration of 0.005 % is sufficient to promote solution of Ti. Preparation of a Ti surface for applying a metal coating is carried out in solutions containing HF. Satisfactory adhesion of the coating with the Ti base was obtained by anodic treatment of the Ti surface in a solution of HF in ethyleneglycol with a small amount of water added. F... zinc-

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plating of Ti an ethyleneglycol solution of Zn fluoride and HF was used and for copper coatings an aqueous solution of Cu hydrofluoborate in water was used. The present paper describes experimental studies of the process of solution and electrochemical behavior of Ti in HBF_4 solutions. Determinations were made of the rate of Ti dissolution in acids of varying composition and the form of Ti transition into solution and the potential of Ti and redox potential of the medium were measured. The apparatus used is shown. Determinations were made in a stream of H_2 passed through the apparatus. The Ti and Pt electrode potentials were measured with a cathode type voltmeter. Ad-M2. The dissolution of Ti was studied at 30°C in aqueous solutions containing 500, 250 and 125 g/l HBF_4 and in alcohol and ethyleneglycol solutions containing 250 g/l HBF_4. The HBF_4 solution was prepared by mixture of equivalent amounts of boric and hydrofluoric acids and contained a certain proportion of HF due to incomplete reaction or hydrolysis. The proportion of solution per unit surface of Ti was 3.91 ml/cm² in all experiments. Curves of Ti dissolution, shown in Fig. 2, have a

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D247/D305

Certain electrochemical ...

[illegible] the after and conform to the equation:

$$P = a \cdot \tau^{b} \qquad (3)$$

where P [illegible] of Ti specimen (mg/cm²), a and b are [illegible] depend on solution composition, temperature, Ti [illegible] of solution per unit surface of specimen; τ is [illegible] rate of dissolution is determined as the first [illegible]

$$[illegible] = \frac{\partial P}{\partial \tau} = ab\tau^{b-1} \qquad (4)$$

where [illegible] rate of dissolution of Ti (mg/cm² · hour). The influence of [illegible] concentration in the solution can be calculated from [illegible] graphically from experimental data. It can also be [illegible] from a parabolic curve equation:

$$[illegible] = K \cdot [Ti]^{[illegible]} \qquad (5)$$

where [Ti] is the [illegible] concentration of Ti in the solution, K

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"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7

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D247/D305

Certain electrochemical . .

and n are constants dependent on solution composition. Empirical formulae are given for the "critical" cathode current densities governing solution of Ni. Ni potentials were -0.6 to -0.7 volts. Redox potentials of solutions formed varied from -0.04 to + 0.13 volts. There are 1 figure, 2 tables and 10 references: 6 Soviet-bloc, 4 non-Soviet-bloc. The references to the English language publications read as follows: Morioka, A. Umezono, J. Japan Inst. Metals, 20, 7, 405, 1956, Dennis L. Stanley, Abner Brenner, Techn. Proc. Am. Electroplaters' Soc., 143, 1956; Hessel, Techn. Proc. Am. Electroplaters Soc., 47, 1960, H. Eisenberg, and R.D. Delarue, J. Electrochem. Soc., 105, 7, 1958.

ASSOCIATION: Kafedra tekhnologii elektrokhimicheskikh proizvodstv Khar'kovskogo politekhnicheskogo instituta imeni V.I. Lenina (Department of Electrochemical Production Technology, Polytechnic Institute, Khar'kov, imeni V.I. Lenin)

SUBMITTED: July 26, 1960

Card 4/5

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7

ANDRYUSHCHENKO, F.K.; OREKHOVA, V.V.

Reduction of methylene iodide on a mercury cathode. Ukr.khim. zhur. 28 no.2:269-270 '62. (MIRA 15:3)
(Methane) (Ethylene) (Electrodes, Mercury)

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7

ANDRYUSHCHENKO, F.K., kand. tekhn. nauk; VASIL'CHENKO, [illegible]

using electrolyte solutions to eliminate hydrate formation in the production of natural gas in the Shebelinka gas field. Neft. i gaz. prom. no.4:[illegible] O-D '63. (MIRA 17:12)

1. Kharkovskiy politekhnicheskiy institut.

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7

ANDRYUSHCHENKO, F.K.; VLASENKO, I.Ye.

Cathodic and anodic polarization of titanium in fluoboric acid solutions. Izv. vys. ucheb. zav.; khim. i khim. tekh. 6 no.3: 455-458 '63. (MIRA 16:8)

1. Khar'kovskiy politekhnicheskiy institut imeni Lenina, kafedra tekhnologii elektrokhimicheskikh proizvodstv.
(Electrodes, Titanium) (Polarization (Electricity))
(Fluoboric acid)

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7

ANDRYUSHCHENKO, F.K.; OREKHOVA, V.V.; BAYRACHNYY, M.I.; DZYABURA, V.F.; ANDRYUSHCHENKO, L.F.

Electrodeposition of metals on titanium. Izv.vys.ucheb.zav.;khim.i khim.tekh. 6 no.5:823-828 '63. (MIRA 16:12)

1. Khar'kovskiy politekhnicheskiy institut imeni Lenina, kafedra tekhnologii elektrokhimicheskikh proizvodstv.

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7

ANDRYUSHCHENKO, F.K.; OREKHOVA, V.V.; GONCHAROVA, Ye.I.; SHMORGUN, V.I.

Effect of pH and buffer concentration on the stability of sodium hydrosulfite in solutions. Report 2. Ukr. khim. zhur. 29 no.2:125-127 '63. (MIRA 16:6)

1. Nauchno-issledovatel'skiy institut osnovnoy khimii, Khar'kov.
(Sodium dithionite)
(Hydrogen-ion concentration)

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7

EZARETYAN, A.M.; ANDRYUSHCHENKO, I.Z.

Sulfite complex of silver. Ukr.khim.zhur. 29 no.5:484-487 '63. (MIRA 16:9)

1. Khar'kovskiy politekhnicheskiy institut im. V.I.Lenina.

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7

ANDRYUSHCHENKO, F.K.; SHAGAYDENKO, V.I.

Corrosion of carbon steel under $CaCl_2$ solution films in an atmosphere of natural gas. Ukr.khim.zhur. 29 no.6:658-662 '63. (MIRA 16:9)

1. Khar'kovskiy politekhnicheskiy institut im. V.I.Lenina.
(Steel--Corrosion) (Gas, Natural)

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7

L 13578-63 EWP(q)/EWT(m)/BDS AFFTC/ASD JD/JG/WB

ACCESSION NR: AP3000192 S/0080/63/036/004/0921/0922

AUTHOR: Andryushchenko, F. K.; Vlasenko, I. Ye. 59

TITLE: Method for treating the surface of Ti before chrome plating 18

SOURCE: Zhurnal prikladnoy khimii, v. 36, no. 4, 1963, 921-922

TOPIC TAGS: Ti, Cr plating, NH_4F, ZnF_2, NiF_2, CoF_2

ABSTRACT: To remove the passive film on Ti so that Cr adheres better, the authors describe a method consisting of mechanical cleaning, removal of grease and rinsing, and immersion in a solution of NH_4F containing ZnF_2, NiF_2, or CoF_2 at room temperature for 15 seconds to 3 minutes. Qualitative analyses showed that the films contained metallic Zn, Ni, or Co and S. Changes occurring in the potential of Ti in aqueous solutions of NH_4F (500 g/l) and/or the other metal fluorides are shown in a graph. After this treatment, the Ti is pickled in 10% HCl for 15-30 seconds, rinsed in tap water for 15-30 seconds, plated with standard Cr electrolyte, and rinsed in hot and cold water. Orig. art. has: 1 figure. "N. V. Golizdra and T. A. Lebedinskaya participated in the study."

Card 1/1

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7

ANDRYUSHCHENKO, F.K.; BAYRACHNYY, V.I.

Negative electrode obtained from iron powders for chemical sources of electric current. Issledovaniya, khim. i khim.tekh. 8 no.2:279-284 '65. (MIRA 18:8)

1. Khar'kovskiy politekhnicheskiy institut imeni Lenina, kafedra tekhnologii elektrokhimicheskikh proizvodstv.

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7

L 46850-66 EWT(m)/T/EWP(t)/ETI IJP(c) DS/JD/GD

ACC NR: AT6024970 (N) SOURCE CODE: UR/0000/65/000/000/0137/0141

AUTHOR: Andryushchenko, F. K.; Gavyrina, N. N.

ORG: none

42
B+1

TITLE: Electrodeposition of a nickel-germanium alloy

SOURCE: AN SSSR. Otdeleniye obshchey i tekhnicheskoy khimii. Zashchitnyye metallicheskiye i oksidnyye pokrytiya, korroziya metallov i issledovaniya v oblasti elektrokhimii (Protective metallic and oxide coatings, corrosion of metals, and studies in electrochemistry). Moscow, Nauka, 1965, 137-141

TOPIC TAGS: electrodeposition, nickel alloy, germanium alloy

ABSTRACT: The paper discusses the electrode processes involved in the deposition of Ni, Ge, and their alloys from electrolytes containing NH_4Cl as the main component and admixtures of free ammonia and ammonium oxalate, which formed ammine complexes. Polarization curves for the Ni-Ge alloy showed that when Ni and Ge are codeposited from an electrolyte containing 4.4 g/l Ni, 1.75 g/l Ge, and 250 g/l NH_4Cl, the charge of Ge ions is depolarized, and that of Ni ions is overpolarized. The optimum composition of the electrolyte from which an α-solid-solution-type-Ni-Ge alloy of great microhardness (810 kg/mm^2) can be deposited was found to be: 10-12 g/l Ni_{met}, 125-130 g/l NH_4Cl, 0.45-0.5 g/l Ge_{met}, 150 ml/l $(NH_4)_2C_2O_4$, t = 30-35°, cathodic current density 0.6 A/dm^2. Orig. art. has: 5 figures.

SUB CODE: 11,13/ SUBM DATE: 13Aug64/ ORIG REF: 002/ OTH REF: 006

Card 1/1

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7

L 06372-67 EWT(m)/EWP(t)/ETI IJP(c) JD/HW

ACC NR: AP6027490 (N) SOURCE CODE: UR/0418/66/000/003/0079/0082

AUTHOR: Andryushchenko, F. K. (Candidate of technical sciences); Marchenko, N. A. (Candidate of technical sciences); Ionycheva, L. S. (Engineer); Gavyrina, N. N. (Engineer)

ORG: None

35
34
B

TITLE: Electrodeposition of zinc and nickel alloys with rare metals

SOURCE: Tekhnologiya i organizatsiya proizvodstva, no. 3, 1966, 79-82

TOPIC TAGS: indium containing alloy, germanium containing alloy, nickel base alloy, zinc base alloy, electrodeposition, electrochemistry

ABSTRACT: The authors discuss the production of nickel-germanium and zinc-indium alloys by electrochemical methods. The joint precipitation of Ni and Ge requires complex electrolytes with a low germanium ion activity. The solution selected for this purpose was a complex of ammonium chloride and ammonia water with and without additives of free ammonia and ammonium oxalate. The electrolyte was prepared by dissolving $Ni(OH)_2$ and GeO_2 in a saturated solution of ammonium chloride with heating no higher than 80°C. The concentration of electrolyte components was (g/ℓ): 1.75-4.4 Ni, 1.75 Ge and 250 NH_4Cl. Polarization curves for separate precipitation of germanium and nickel show a shift toward more negative potentials for germanium. The curve for the alloy

Card 1/2 UDC: 621.357.74/669.24:669.783+669.87:669.5

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"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7

L 06372-67

ACC NR: AP6027490

with a nickel concentration of 4.4 g/ℓ and a germanium concentration of 1.75 g/ℓ is shifted toward more positive potentials in comparision with the curves for the individual metals. This indicates depolarization of the germanium ions and excess polarization of the nickel ions during joint precipitation. The addition of ammonium oxalate and free ammonia improves the quality of the alloy deposition. The base for the electrolyte used in deposition of indium-zinc alloy was a tartrate complex of indium and zinc ammonium. A table is given showing the compositions of six electrolytes which were studied. The polarization curve for Zn-In is shifted toward positive values with respect to the curves for zinc and indium separately. Analysis of the polarization curves shows that the polarization for indium precipitation is considerably greater than that for zinc with an increase in current density. A high quality alloy containing 3-15% indium was produced with a current density of 0.5-1.0 a/dm^2 with the following electrolyte composition (g/ℓ): metallic indium (in the sulfate) — 0.5; metallic zinc (in the sulfate) — 30; sodium sulfate — 50; ammonium sulfate — 25; sodium bitartrate — 20; and an aqueous solution of ammonia (25%) — 250 mm/ℓ. This alloy has a higher resistance to corrosion than pure zinc plating. Orig. art. has: 1 table.

SUB CODE: 11/ SUBM DATE: None

Card 2/2

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7

ANDRYUSHCHENKO, G.N.

Nickel inclusions in quartz of the southern Urals. Trudy IGEM no.17: 5-11 '57. (MIRA 11:6)

(Ural Mountains--Quartz)
(Nickel)

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7

ANDRYUSHCHENKO, G.N.

Data on the mineralogy and petrography of a crystalliferous regions in the Urals. Trudy IGEM no.40:5-45 '60. (MIRA 13:11)
(Ural Mountains--Quartz)

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"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7

ANDRYUSHCHENKO, I.

The community is our support. Zhil.-kom.khoz. 12 no.7:6-7 Jl '62. (MIRA 16:5)

1. Nachal'nik rayonnogo zhilishchnogo upravleniya Khar'kova.
(Kharkov--Apartment houses)

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7

LISKOVSKIY, N.G.; MEZHUYEV, V.I.; KOSOLAPOV, V.M.; ANDRYUSHCHENKO, I.A.

Using the DKST-2000 lamps in Krivoy Rog Basin open-pit mines. Gor. zhur. no.9:65-66 S '64. (MIRA 17:12)

1. Krivorozhskiy filial Vsesoyuznogo nauchno-issledovatel'skogo instituta organizatsii i mekhanizatsii shakhtnogo stroitel'stva (for Liskovskiy, Mezhuyev). 2. Rudnik Yuzhnogo gorno-obogatitel'nogo kombinata (for Kosolapov, Andryushchenko).

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7

ANDRYUSHCHENKO, I.G.; GULYAYEV, L.S.

Practical application of soil research results obtained on the "Oneshts" State Farm in connection with the use of fertilizers. Pochvovedenie no.10:73-78 '60. (MIRA 13:10)

1. Gosudarstvennyy proyektnyy institut, Kishinev.
(Fertilizers and manures) (Soil research)

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7

KOSTYUSKO, V.A.; ANDRYUSHCHENKO, I.S.

Removable dental prosthesis with a combined base. Zdravo-okhranenie 5 no.5:54 S-O'62. (MIRA 16:7)

1. Iz Moldavskoy respublikanskoy klinicheskoy bol'nitsy (glavnyy vrach - T.V.Moshnyaga).
(DENTAL PROSTHESIS)

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7

ANDRYUSHCHENKO, F.K.; OREKHOVA, V.V.; BAYRACHNYY, B.I.; DZYABURA, V.F.; ANDRYUSHCHENKO, L.F.

Electrodeposition of metals on titanium. Izv.vys.ucheb.zav.;khim.i khim.tekh. 6 no.5:823-828 '63. (MIRA 16:12)

1. Khar'kovskiy politekhnicheskiy institut imeni Lenina, kafedra tekhnologii elektrokhimicheskikh proizvodstv.

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7

ANDRYUSHCHENKO, M.

State farm center in a city-type village. Sil'. bud. 9 no.12: 8-9 D '59 (MIRA 13:3)

1. Starshiy proizvoditel' rabot sovkhoza "Berislavs'kiy" Khersonskoy oblasti.
(Kherson Province--State farms)

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7

ATABEKOV, I. G.; RAZVYAZKINA, G. M.; ANDRYUSHCHENKO, M. D.; KOSMACHEVSKIY, A. S., doktor biolog. nauk

Brief reports. Zashch. rast. ot vred. i bol. 6 no.6:56-57 Je '61. (MIRA 16:4)

1. Nauchnyy rabotnik Izmail'skoy opytnoy stantsii (for Andryushchenko). 2. Krasnodarskiy pedagogicheskiy institut (for Kosmachevskiy).

(Plants, Protection of)

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7

ANDRYUSHCHENKO, M.D., aspirant

A dangerous enemy of corn. Zashch. rast. ot vred. i bol. 8 no.6:15-16 Je '63. (MIRA 16:8)

1. Vsesoyuznyy institut kukuruzy, Izmail'skaya opytnaya stantsiya, Mirnopol'ye, st. Artsyz, Odesskaya obl.
(Odessa Province--Corn (Maize)--Diseases and pests)
(Odessa Province--Frit flies--Extermination)

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7

ANDRYUSHCHENKO, N.F.; LYAKHOVICH, L.S.; MISHIN, P.A.; FUNSHTEYN, Ya.N.

Surface hardening of the semiaxles of the rear axle of the MAZ-200 and MAZ-205 motortrucks. Avt.prom. 29 no.10:31-33 O '63. (MIRA 16:10)

1. Minskiy avtozavod i Belorusskiy politekhnicheskiy institut.

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7

STUKALKIN, A.N.; MAVDRIKOV, F.I.; ANDRYUSHCHENKO, N.I.; TREMPOLETS, V.V.

Main controller for a.c. locomotives with low-voltage regulation.
Sbor. nauch. trud. ElNII 3:124-131 '63. (MIRA 17:4)

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7

ANDRYUSHCHENKO, Nikolay Petrovich; ZHELTYSHEV, Vasiliy Pavlovich; ZHEREBKOV, I.V., red.; ABRAMOVA, Ye.A., tekhn.red.

[Wroking with a coping saw] Vypilivanie lobzikom. Rostov-na-Donu. Rostovskoe knizhnoe izd-vo, 1959. 24 p. (MIRA 13:3)
(Handicraft) (Jig saw)

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7

KOMLYAR, Z. I., ANDRYUSHCHENKO, O. A.

Dredging Machinery

Excavating pump 1000-80. Vest. mash. 31 no. 12, 1951.

9. Monthly List of Russian Accessions, Library of Congress, September 1952. Unclassified.

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7"

"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7

USSR/Soil Science - Genesis and Geography of Soils. J

Abs Jour : Ref Zhur Biol., No 22, 1958, 99981

Author : Andryushchenko, O.N.

Inst : Belorussian University.

Title : A Soil-Geographic Sketch of the Central Russian Elevation (Orlovskaya Oblast')

Orig Pub : Uch. zap. Belorussk. un-t, 1957, vyp. 33, 33-70

Abstract : Sod-podzolic soils are located in the northwestern and western rayons of the Orlovskaya Oblast'. They represent slightly, averagely and heavily-podzolic soils. The profile depth of the first varieties in 60-80 cm; the humus content, 3.5-5.5%, and in heavily-podzolic soils and podzols, 2-3%. After plowing and cultivation, the podzols are transformed into heavily-podzolic soils. The greatest areas in the oblast' are taken up by gray

Card 1/3

Card 3/3

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"APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7

ANDRIUSHCHENKO, G.N., Doc Tie Sci--(diss) "[illegible] conditions of the Near-Caspian lowland. ([illegible] of virgin soils)." Minsk, 1958. 40 pp (Min of Higher Education USSR. Belorussian State U im V.I.Lenin. Chair of Science of Soils), [illegible] copies. List of author's works pp39-40 (10 titles) (KL,[illegible],121)

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000101610005-7"