"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9

KUSKOV, V.K.; KOSTRYKINA, A.G.

Preparation of alkylphenols by the rearrangement of alkylphenyl borates in the presence of ion exchange resins. Zhur.ob.khim. 31 no.9:3104-3106 S '61. (MIRA 14:9)

1. Moskovskiy gosudarstvennyy universitet imeni M.V.Lomonosova.
(Phenols) (Boric acid)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9

KOMAROV, N.; KOSTRYUKOV, A.

Give chief attention to the chemical industry construction projects. Fin.SSSR 38 no.2:22-25 F '64. (MIRA 17:2)

1. Upravlyayushchiy Saratovskoy kontoroy Stroybanka (for Komarov).
2. Nachal'nik planovo-ekonomicheskogo otdela Saratovskoy kontory Stroybanka (for Kostryukov).

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9

GOREV, Yakov Yeliseyevich; KOSTRYUKOV, Aleksey Vasil'yevich; ROGINSKIY, S., otv.red.; ZAVERNYAYEVA, L., red.izd-va; TELEGINA, T., tekhn.red.

[Analysis of the financial plan for the construction industry] Analiz stroifinplana. Moskva, Gosfinizdat, 1959. 85 p. (MIRA 12:12)

(Construction industry--Finance)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9

YERONIN, V.A.; KOSTRYUKOV, G.V.; LUK'YANOV, Ye.P.

Complete automation and telemechanization of Tatar oil fields.
Neft.khoz. 38 no.8:6-8 Ag '60. (MIRA 13:8)
(Tatar A.S.S.R.--Oil fields--Production method)
(Automatic control)
(Remote control)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9

KOSTYUKOV, Gennadiy Vasil'yevich; GOLIKOV, Andrey Dmitriyevich; SAFRONOV, S.V., red.; SAVINA, Z.A., ved. red.; VORONOVA, V.V., tekhn. red.

[Temperature conditions of the Romashkino oil field] Temperaturnyi rezhim Romashkinskogo mestorozhdeniia. Moskva, Gostoptekhizdat, 1962. 96 p. (MIRA 15:3)
(Romashkino region—Oil reservoir engineering)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9

ZHDANOV, M.M.; KOSTRYUKOV, G.V.; ASFANDIYAROV, Kh.A.; MAKSUTOV, R.A.; KONDAKOV, A.N.; TURUSOV, V.M.; SILIN, V.A.; PILYUTSKIY, O.V.; SHELDYBAYEV, B.F.; PETROV, A.A.; SMIRNOV, Yu.S.; KOLESNIKOV, A.Ye.; DROZDOV, I.P.; IVANTSOV, O.M.; TSYGANOV, B.Ya.; KORNONOGOV, A.P.; VDOVIN, K.I.; ALEKSEYEV, L.A.; GAYDUKOV, D.T.; LIPOVETSKIY, A.Ya.; DANYUSHEVSKIY, V.S.; VEDISHCHEV, I.A.; ALEKSEYEV, L.G.; KRASYUK, A.D.; IVANOV, G.A.

Author's communications. Neft. i gaz. prom. no.2:67-68 Ap-Je '64. (MIRA 17:9)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9

KOSTRYUKOV, K.I

Kostryukov, K. I. On an attempt to publish the works of Leonhard Euler. Ist.-Mat. Issled. 7, 630-640 (1954). (Russian) I - F/W

USSR

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9

KARABANOV, A.I.; KOSTRYUKOV, K.S.

Compressorless unit for heating bitumen and bituminous mastics. Suggested by A.I.Karabanov, K.S.Kostriukov. Rats.i izobr.predl. v stroi. no.13:120-122 '59. (MIRA 13:6)

1. Stalingradskoye stroitel'no-montazhnoye upravleniye. (Bitumen)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9

PROKOPCHUK, B.I.; IZRAILEV, L.M.; IL'IN, P.A.; LEONOV, B.N.; SUSOV, M.V.; KOSTRYUKOV, M.S.

Diamond potential of the Lena Valley; new diamond-bearing area in the northeastern part of the Siberian Platform. Trudy IAFAN AN SSSR Ser. geol. no.9:115-122 '63. (MIRA 16:12)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9

PROKOPCHUK, B.I., aspirant; KOSTRYUKOV, M.S.; KOROLEVA, N.M.

Preservation of pyrope depending on the conditions governing the transportation of loose sediments. Izv. vys. ucheb. zav.; geol. i razv. 7 no.5:58-63 My '64. (MIRA 18:3)

1. Vsesoyuznyy aerogeologicheskiy trest.

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9

KOSTRYUKOV, V.A., inzh.; KOPYLOV, L.I., inzh.; GOVOROV, V.P., inzh., nauchnyy red.; YEL'CHUKOV, V.S., red.; BERKUT, I.V., otvetsv. za vypusk

[Program for the subject "Production standards and estimates" in the technical school major "Sanitary installations in buildings," approved by the Ministry of Higher Education of the U.S.S.R., April 14, 1955. A 90-hour course] Programma predmeta "Tekhnicheskoe normirovanie i smety" k uchebnomu planu spetsial'nosti tekhnikumov "Sanitarno-tekhnicheskie ustroistva zdanii," utverzhdennomu Ministerstvom vysshego obrazovaniia SSSR, 14 aprelia 1955 g. Ob"em programmy - 90 chasov. Moskva, Uchebno-metodicheskii kabinet, 1958. 9 p. (MIRA 12:2)

1. Russia (1917- R.S.F.S.R.) Ministerstvo stroitel'stva. Otdel uchebnykh zavedeniy upravleniya kadrov.
(Construction industry)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9

KOSTRYUKOV, Valentin Andreyevich; LIVCHAK, I.F., retsenzent; YEGIAZAROV, A.G., kand.tekhn.nauk, nauchnyy red.; MINEMYAGI, D.K., red.izd-va; ALEKSANDROVA, O.M., tekhn.red.

[Examples of calculations of heating and ventilation systems] Sbornik primerov rascheta po otopleniiu i ventiliatsii. Moskva, Gos.izd-vo lit-ry po stroit., arkhit. i stroit.materialam. Pt.1. [Heating] Otoplenie. 1960. 189 p. (MIRA 13:9)
(Heating)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9

ORLOV, A.I.; SHCHEGLOV, V.P., dotsent, kand.tekhn.nauk, retsenzent; KOSTRYUKOV, V.A., inzh., retsenzent; YEGIAZAROV, A.G., kand. tekhn.nauk, nauchnyy red.; SMIRNOVA, A.P., red.izd-va; RYAZANOV, P.Ye., tekhn.red.

[Heating and ventilation] Otoplenie i ventiliatsiia. Moskva, Gos.izd-vo lit-ry po stroit., arkhit. i stroit.materialam. Pt.1. [Heating] Otoplenie. 1960. 223 p. (MIRA 13:9)
(Heating)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9

KOSTRYUKOV, Valentin Andreyevich

[Examples for calculating heating and ventilating systems] Primery rascheta po otopleniiu i ventiliatsii. 2., izd., perer. i dop. Moskva, Stroiizdat. Pt.1. (Heating] Otoplenie. 1964. 201 p. (MIRA 17:10)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9

KOSTRYUKOV, Valentin Andreyevich; NIKEMYAGI, D.K., red. izd-va; GOL'DBERG, T.M., tekhn. red.

[Collection of examples of calculations for heating and ventilation]Sbornik primerov rascheta po otopleniiu i ventiliatsii. Moskva, Gosstroiizdat. Pt.2.[Ventilation] Ventiliatsiia. 1962. 198 p. (MIRA 15:11)
(Ventilation)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9

KOSTRYUKOV, V. N.

USSR/Chemistry - Potassium Salts Aug 52

"Measurements of Specific Heat Between 12 and 300°K: Specific Heat and Entropy of Potassium Chloride," P. G. Strelkov, Ye. S. Itskevich, V. N. Kostryukov, and G. G. Mirskaya, Inst of Phys Prob imeni S. I. Vavilov Acad Sci USSR; Moscow State Inst of Measures and Measuring Instruments

"DAN SSSR" Vol 85, No 5, pp 1085-1088

In a specially constructed apparatus, the specific heat and entropy of potassium chloride were measured. The results agree with those obtained by other workers. Submitted by Acad M. M. Dubinin 4 Jun 52

PA 239T25

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9

KOSTRYUKOV, V. N.

USSR/Chemistry

Card 1/1

Authors : Strelkov, P. G., Tsikevich, E. S., Kostryukov, V. N., Mirskaya, G. G., and Samoylov, B. N.

Title : Thermodynamic investigations at low temperatures. Part 2.- Measurement of specific heat of solids and liquids between 12 and 300° K.

Periodical : Zhur. Fiz. Khim. 28, Ed. 3, 459-472, March 1954

Abstract : A vacuum calorimeter arrangement with screening shields was constructed which enables to measure at low temperatures the specific heat of substances which at room temperature are either in solid or liquid states. The vacuum housing of the calorimeter is sectional because of the sectional vacuum compressor functioning at low temperatures. The installation is equipped with all other auxiliary devices. Calibration is made on the empty calorimeter. The described arrangement enables to conduct measurements in a temperature range of from 12-300° K. Three references. Drawings, graphs.

Institution : Acad. of Sc. USSR, the S. I. Vavilov Institute of Physical Problems and the Moscow State Institute of Weights and Measures

Submitted : June 6, 1953

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9

KOSTRYUKOV, V. N.

USSR

/ Thermodynamic investigations at low temperatures III. Heat capacity of potassium chloride between 12 and 300°K. Entropy of potassium chloride at 298.16°K. [illegible] G. Strelkov, E. S. Itskevich, V. N. Kostryukov, and [illegible] G. Mirskaya (S. I. Vavilov Inst. Phys. Problems, Acad. Sci. U.S.S.R., Moscow). Zhur. Fiz. Khim. 28, [illegible], cf. C.A. 47, 395e; 48, 133956.—The heat capacity C_p of KCl was measured in a previously described calorimetric app. (loc. cit.) at 105 temps. in the interval 12.2-297.7°K. Data are tabulated. The entropy of KCl S at 298.16°K. is 19.68 ± 0.05 cal./mole degree. Values of S for temps. between 12 and 31°K. and C_p between 12 and 298°K. are compared graphically with literature data, the agreement is very close. IV. Method of measurement of the heat capacity of condensed gases. V. N. Kostryukov, R. A. Alikhanyants, B. N. Samoilov, and P. G. Strelkov (S. I. Vavilov Inst. Phys. Problems, Acad. Sci. U.S.S.R., Moscow). Ibid. 650-5.—A previously described calorimetric app. (loc. cit.) was adapted for measurement of the heat capacity of a condensed gas by addn. of a described and illustrated capillary of small vol. whose temp. was kept equal to that of the calorimeter by means of a thermocouple-controlled heating coil. The condensed gas, after being weighed in an ampul within the app., was distd. through the capillary into the calorimeter. J. W. Loweberg, Jr.

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9

USSR/Chemistry - Analysis methods

Card 1/1 Pub. 147 - 17/25

Authors : Kostryukov, V. N., and Strelkov, P. G.

Title : Thermodynamic investigations at low temperatures. Part 5. Melting, pre-melting and pseudo-phase conversion of Hg.

Periodical : Zhur. fiz. khim. 28/10, 1825-1830, Oct 1954

Abstract : Calorimetric investigations, carried out close to the melting point, showed no anomalies in the specific heat of pure Hg in solid, liquid and supercooled states. The absence of measurable phenomena, caused by the existence of hetero-phase fluctuations in solid Hg, was established. Experimental pre-melting of solid Hg was brought about by the addition of Zn, Tl and Zn + Tl to the pure mercury. During Tl concentration in the mercury ranging from 0.02 to 0.1% the specific heat peak was observed at a melting point of the Tl Hg eutectics. Eleven references: 7-USSR; 3-USA and 1-English (1915-1954). Table; graphs; drawing.

Institution : Academy of Sciences USSR, The S. I. Vavilov Institute of Physical Problems

Submitted : March 13, 1954

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9

KOSTRYUKOV, V.N.

AUTHORS: Kostryukov, V.N., and Samorukov, O.P. 120-5-35/35

TITLE: A Pin Switch with a Compound Pin (Shtyr'kovyy perekl-yuchatel' so skleyennym shtyr'kom)

PERIODICAL: Pribory i Tekhnika Eksperimenta, 1957, No.5, p.126 (USSR).

ABSTRACT: A simple switch is described which can be used to connect a galvanometer across a thermocouple with or without a shunt, or to connect a critically damping resistance across the galvanometer. The switch has only one pin consisting of two electrically insulated parts. The pin (Fig.1) is prepared from red copper sheets glued together with the glue БФ-4. In the production of the pin, the thin layer of glue which serves as insulation may be bridged by copper. In order to prevent this, the blanks from which the pin is made are specially shaped plates, so that the seam (where the two parts are glued together) is not subjected to further treatment. The form of the plates from which the pin is made is shown in Fig.1. The switch itself consists of copper plates attached to an ebonite panel with sockets between them. The switching over is carried out by connecting corresponding plates by plugging in the pin into one of the three sockets (Fig.2). The plug is held in the sockets by means of grooves which hold a projection on the

ardl/2

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9

A Pin Switch with a Compound Pin. 120-5-35/35

pin. The resistance of the insulation between the two parts of the pin is 10^7 Ω, the contact resistance being less than 10^{-4} Ω. The switch was found to be free from interference from thermal e.m.f.
There are 2 figures.

ASSOCIATION: All-Union Scientific Research Institute for Physico-technical and Radio-technical Measurements (Vsesoyuznyy nauchno-issledovatel'skiy institut fiziko-tekhnicheskikh i radiotekhnicheskikh izmereniy)

SUBMITTED: February 9, 1957.

AVAILABLE: Library of Congress

Card 2/2

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9

AUTHORS: Kostryukov, V. N., Samorukov, O. P., Strelkov, P. G. SOV/76-32-6-25/46

TITLE: Thermodynamic Investigations at Low Temperatures (Termodinamicheskiye issledovaniya pri nizkikh temperaturakh) VII. The Phase Transitions in Solid BF_3, CF_4 and SiF_4 (VII. Fazovyye perekhody v tverdykh BF_3, CF_4 i SiF_4)

PERIODICAL: Zhurnal fizicheskoy khimii, 1958, Vol. 32, Nr 6, pp. 1354 - 1361 (USSR)

ABSTRACT: The data by Eucken and Schröder (Ref 1) do not contain any clear explanation whether the observed transformation in the case of BF_3 is isothermal. Therefore the phase transformation can be interpreted incorrectly. For this reason the authors repeated the calorimetric investigations. They used an investigation method described already earlier, and used BF_3 preparations which had been produced by N.N.Mikhaylov at the Institute for Physical Problems, and the preparations BF_3-2 and CF_4 and SiF_4 obtained from the Institute of Applied Chemistry. From the

Card 1/3

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9

Thermodynamic Investigations at Low Temperatures. VII. SOV/76-32-6-25/46
The Phase Transitions in Solid BF_3, CF_4 and SiF_4

experimental results obtained the authors concluded that the phase transition found by Schröder and Eucken is not characteristic for the BF_3-lattice but for the system BF_3-additions; the measurements of the thermal capacity from 12.6°K to the melting point did not show any corresponding anomalies in the case of BF_3; it therefore can be concluded that in solid BF_3 no phase transition takes place. The measurements with CF_4 showed the already observed phase transition which in the present paper is, however, regarded as one of second order. An anomalous drop of the thermal capacity prior to the melting point was not noticed. It is assumed that the phase transition in CF_4, that in SiF_6 and the $\alpha \rightleftarrows \beta$ transition in quartz belong to the type of second order. Investigations of SiF_4 showed that no phase transition takes place and that therefore the question whether crystal lattices consisting of similar tetrahedric molecules would react in a similar way must be answered in the negative. Then corrections of the triple points of BF_3, CF_4 and SiF_4 are mentioned

Card 2/3

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9

Thermodynamic Investigations at Low Temperatures. VII. 76-32-6-25/46
The Phase Transitions in Solid BF_3, CF_4 and SiF_4

which the authors were able to carry out by experimental determinations of the depression of additions. There are 6 figures, 1 table, and 7 references, 6 of which are Soviet.

ASSOCIATION: Akademiya nauk SSSR, Institut fizicheskikh problem, Moskva (AS USSR, Moscow, Institute of Physical Problems)

SUBMITTED: February 18, 1957

1. Baron fluorides--Thermodynamic properties 2. Copper fluorides --Thermodynamic properties 3. Silicon fluorides--Thermodynamic properties 4. Metal fluorides--Temperature factors 5. Phase transitions

Card 3/3

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9

05473
SOV/120-59-3-44/46

AUTHORS: Bykov, V. P., and Kostryukov, V. N.

TITLE: A Device for Keeping the Level of Liquid Nitrogen in a Dewar Constant (Pribor dlya avtomaticheskogo podderzhaniya postoyannogo urovnya zhidkogo azota v dyuare)

PERIODICAL: Pribory i tekhnika eksperimenta, 1959, Nr 3 p 154 (USSR)

ABSTRACT: The device (Fig 1) consists of a metal siphon A, with an automatic siphon valve Б and a sealing head B, which is fixed to the liquid-nitrogen container. The valve allows the container to communicate with the atmosphere; the tube and siphon contain oxygen, and the tube serves to indicate the nitrogen level in the dewar. The oxygen evaporates and closes the valve if the nitrogen falls below the tip of the tube. The pressure in the container rises and forces the liquid over into the dewar until the tube is again cooled, when the valve quickly opens again. The rubber ring E ensures that the siphon is properly sealed to the container. The valve on the left is a safety valve. (Complete translation of all relevant matter). There is 1 figure.

Card 1/2

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9

05473

SOV/120-59-3-44/46

A Device for Keeping the Level of Liquid Nitrogen in a Dewar Constant

ASSOCIATION: Institut fizicheskikh problem AN SSSR (Institute of Physical Problems, Academy of Sciences of the USSR)

SUBMITTED: February 20, 1958

Card 2/2

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9

S/076/60/034/008/028/039/XX
B015/B063

AUTHORS: Kostryukov, V. N. and Morozova, G. Kh.

TITLE: Thermodynamic Studies at Low Temperatures. X. Specific Heat of the Yellow Modification of Lead Monoxide in the Temperature Range 12.5-303°K and Entropy at 298.15°K

PERIODICAL: Zhurnal fizicheskoy khimii, 1960, Vol. 34, No. 8, pp. 1833 - 1836

TEXT: The specific heat of yellow PbO in the temperature interval 12-300°K has been determined by direct calorimetric measurements which were then used to determine entropy for 298.15°K since different values are mentioned in publications (Refs.2-6). The test method applied is described in Ref.7; samples with a particle size of 5 μ were used. 103 measurements were made in the above temperature interval. The specific heat of PbO is given in Table 1. Anomalies were not observed. Using V. V. Tarasov's formula for heterodynamic structures (Ref.10), the values of entropy and enthalpy for 12°K were extrapolated: $S_{12^oK} - S_{0^oK} = 0.15 \pm 0.02$ e.u.; $H_{12^oK} - H_{0^oK} = 1.61 \pm 0.2$ cal. The values of enthalpy and the potentials

Card 1/6

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9

Thermodynamic Studies at Low Temperatures. X. Specific Heat of the Yellow Modification of Lead Monoxide in the Temperature Range 12.5-303°K and Entropy at 298.15°K

S/076/60/034/008/028/039/XX
B015/B063

were determined from these data and from the integrated equations of the experimental curves $C_p(T)$ and C_p/T (T) (Table 2). This table shows that the standard entropy of yellow PbO is $S^o_{298.15^oK}$=16.42±0.05 cal/mole·degree. A comparison between this value and published data indicates that the authors' value is very exact. Professor P. G. Strelkov is thanked for guidance and interest. There are 3 tables and 10 references: 2 Soviet, 4 US, 2 German, 1 British, and 1 Canadian.

ASSOCIATION: Institut fiziko-tekhnicheskikh i radiotekhnicheskikh izmereniy (Institute of Physical, Technical, and Radiotechnical Measurements)

SUBMITTED: December 1, 1958

Card 2/6

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9

S/076/60/034/008/028/039/XX
B015/B063

Теплоемкость окиси свинца (желтая модификация) C_p, $\frac{кал}{град \cdot моль}$ (экспериментальные значения)

T, °K	C_p, $\frac{кал}{град \cdot моль}$	T, °K	C_p, $\frac{кал}{град \cdot моль}$	T, °K	C_p, $\frac{кал}{град \cdot моль}$
12,47	0,50	74,63	5,46	19[illegible],43	9,48
12,70	0,52	77,76	5,59	197,26	9,52
12,74	0,50	81,09	5,79	200,14	9,56
13,42	0,63	84,00	5,93	201,15	9,60
14,23	0,67	86,83	6,06	204,28	9,66
14,55	0,71	89,56	6,24	204,59	9,67
15,35	0,81	97,44	6,51	208,62	9,74
16,25	0,88	100,53	6,63	209,14	9,75
17,03	1,02	105,88	6,86	213,94	9,79
17,60	1,01	107,99	6,94	217,86	9,87
18,31	1,14	111,01	7,04	218,99	9,87
18,54	1,20	114,00	7,17	223,69	9,96
18,92	1,22	117,37	7,27	225,77	10,00
19,25	1,25	119,05	7,34	229,76	10,13
19,48	1,26	123,55	7,51	229,98	10,05
20,05	1,35	125,17	7,56	233,05	10,12

Card 3/6

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9

S/076/60/034/008/028/039/XX
B015/B063

20,08	1,36	127,78	7,66	237,21	10,16
20,61	1,39	130,36	7,73	240,65	10,29
20,85	1,45	132,07	7,80	241,36	10,29
21,09	1,49	135,02	7,90	244,41	10,35
22,15	1,59	138,00	8,00	250,30	10,38
24,12	1,82	139,87	8,09	256,16	10,49
25,04	1,99	143,83	8,19	266,17	10,58
30,42	2,49	145,99	8,26	271,91	10,68
37,83	3,22	149,45	8,37	274,93	10,69
39,11	3,32	152,88	8,47	289,95	10,85
43,86	3,66	154,97	8,53	294,47	10,90
45,00	3,77	161,68	8,76	295,38	10,91
48,84	4,08	167,23	8,85	298,39	10,92
49,99	4,14	170,73	8,97	299,18	10,95
56,63	4,54	172,95	9,04	299,48	10,94
58,72	4,65	178,20	9,09	301,37	10,98
61,70	4,80	186,42	9,31	302,74	10,99
64,57	4,93	189,09	9,33		
71,03	5,28	193,05	9,43		

Card 4/6

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9

S/076/60/034/008/028/039/XX
B015/B063

Таб. 2

Таблица 2

Значения термодинамических функций для PbO (желтая модификация)
(1 калория — 1,1840 абс. джоуля)

T,° K	C_p, $\frac{кал}{град \cdot моль}$	$H_T - H_0$, $\frac{кал}{моль}$	S_T, $\frac{кал}{град \cdot моль}$	$\frac{H_T - H_0}{T}$, $\frac{кал}{град \cdot моль}$	$\Phi' = S - \frac{H_T - H_0}{T}$, $\frac{кал}{град \cdot моль}$
5	0,04*	0,04*	0,04	0,013	
10	0,28*	0,04	0,013	0,008	0,005
25	1,93	0,78	0,094	0,078	0,016
50	4,11	16,7	0,94	0,67	0,27
100	6,62	94,9	3,02	1,90	1,12
150	8,37	367,7	6,76	3,68	3,08
200	9,57	744,5	9,73	4,96	4,77
250	10,38	1195	12,32	5,98	6,35
273,15	10,67	1695	14,54	6,78	7,76
293,15	10,88	1939	15,47	7,10	8,37
298,15	10,94	2154	16,24	7,35	8,89
300	10,95	2208	16,42	7,41	9,02
		2220	16,49	7,43	9,06

* Экстраполированные значения extrapolated values

Card 5/6

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9

S/076/60/034/008/028/039/XX
B015/B063

Text to the tables: Table 1 - Specific Heat of Lead Monoxide (yellow modification) C_p cal/degree·mole (experimental values), 1 = C_p cal/degree·mole. Table 2 - Values of the Thermodynamic Functions for PbO (yellow modification) (1 calorie - 1.1840 absolute joules), 1 = C_p cal/degree·mole, 2 = $H_T - H_o$, cal/mole, 3 = S_T, cal/degree·mole, 4 = $H_T - H_o/T$, cal/degree·mole, 5 = $\Phi' = S - H_T - H_o/T$, cal/degree·mole.

Card 6/6

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9

SKLYANKIN, A.A.; STRELKOV, P.G.; KOSTRYUKOV, V.N.

Standard table of the heat capacity of benzoic acid at constant volume in the temperature range of 10 to 350 K. Izm.tekh. no.6: 24-26 Je '61. (MIRA 14:5)

(Benzoic acid--Thermal properties)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9

26544

S/076/61/035/008/007/016
B101/B218

11.3500
11.1240

AUTHOR: Kostryukov, V. N. (Moscow)

TITLE: Thermodynamic studies at low temperatures. XI. The specific heat of lithium hydride between 3.7 and 295°K. Entropy and enthalpy at 298.15°K

PERIODICAL: Zhurnal fizicheskoy khimii, v. 35, no. 8, 1961, 1759-1762

TEXT: The author attempts to render more precise the values of specific heat and entropy of LiH, hitherto only inaccurately determined, and to find out whether the Debye limiting law holds for this substance with simple cubic lattice but strongly differing atoms, as regards their size. LiH of a degree of purity of 99.8% was used; measurements above 12°K were made in nitrogen atmosphere by a method described already earlier (P. G. Strelkov, Ye. S. Itskevich, V. N. Kostryukov, G. G. Mirskaya, and B. N. Samoylov, Zh. fiz. khimii, 28, 459, 1954). The only difference with respect to the above paper consisted in the fact that a thin stainless-steel calorimeter (wall thickness 0.15 mm) was used. Its surface was covered with БФ-4 (BF-4) mass, and then the heater of constantan wire was wound around. The temperature

Card 1/4

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9

was measured with a calibrated platinum resistance thermometer. Measurement below 12°K were made with the same calorimeter in a helium cryostat (Ye. S. Itskevich and P. G. Strelkov, Zh. eksperim. i teor. fiz., 32, 467, 1957). Temperature was measured by a carbon resistance thermometer which for every individual experiment was calibrated against the temperature of liquid helium and the triple point of hydrogen. These measurements were performed at the Institut fizicheskikh problem AN SSSR (Institute of Physical Problems, AS USSR). The data for the specific heat of LiH are given in Table 1. It was found that the Debye limiting law holds down to temperatures corresponding to $\sim 0.05\ \Theta_D$. Between 10-20°K, measurements of the specific heat are influenced by sorption of free H_2, which is formed by dissociation of LiH in the calorimeter at temperatures around room temperature. The entropy S_T of crystalline LiH at 298.15°K was found to be 4.79 ± 0.005 entropy units. For this temperature, it is further given: $H_T - H_0 = 902.81$ cal/deg·mole. The fact that his results for S_T and c_p do not agree with those obtained by F. Rossini et al. (see below) is explained by the author in that those scientists worked with unsufficiently pure substances, and that the determination of c_p were made inaccurately. The

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9

26544

Thermodynamic studies at low ... S/076/61/035/008/007/016
B101/B218

T°, K	① C_p, кал/град·моль	T°, K	② C_p, кал/град·моль	T°, K	③ C_p, кал/град·моль
3,72	0,0001	20,30	0,0137	125,61	2,325
4,28	0,00015	20,39	0,0131	137,02	2,733
4,89	0,0002	21,02	0,0147	140,00	2,805
6,98	0,0007	22,48	0,0153	155,90	3,271
8,20	0,0012	24,55	0,0200	158,64	3,352
9,82	0,0020	30,10	0,0405	178,51	3,923
10,85	0,0022	33,52	0,0495	181,71	4,005
11,03	0,0017	35,30	0,0683	203,89	4,577
11,42	0,0029	45,54	0,145	207,35	4,672
12,20	0,0027	47,22	0,163	208,08	4,687
12,90	0,0038	59,76	0,372	210,16	4,749
13,60	0,0059	61,53	0,408	217,83	4,955
13,71	0,0033	68,77	0,579	220,54	5,001
14,01	0,0057	80,17	0,900	228,32	5,207
14,53	0,0048	82,29	0,960	229,60	5,230
14,71	0,0062	90,14	1,214	236,42	5,415
15,33	0,0073	92,27	1,279	237,92	5,442
15,70	0,0076	99,83	1,523	245,03	5,586
16,65	0,0081	101,75	1,584	247,53	5,656
17,50	0,0097	111,25	1,896	260,97	5,939
18,17	0,0113	113,39	1,955	264,18	6,017
19,65	0,0113	123,17	2,277	292,65	6,579
				295,50	6,639

Card 4/4

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9

26544

Thermodynamic studies at low ... S/076/61/035/008/007/016
B101/B218

author thanks Academician P. L. Kapitsa for the possibility of making measurements at the temperature of liquid helium, and Professor P. G. Strelkov for his interest displayed in the work. There are 2 tables and 5 references: 3 Soviet-bloc and 2 non-Soviet-bloc. The reference to English-language publication reads as follows: F. Rossini, D. D. Wagman, W. H. Evans, S. Levins, a. I. Jaffe, Selected values of chemical thermodynamic properties, Cir. 500 nat. Br. Standards U. S., 1952.

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy institut fiziko-tekhnicheskikh i radiotekhnicheskikh izmereniy (All-Union Scientific Research Institute of Physical, Technical, and Radiotechnical Measurements)

SUBMITTED: November 26, 1959

Table 1. Specific heat of LiH (1 cal = 1.1840 absolute joule)
Legend: 1) c_p, cal/deg·mole.

Card 3/4

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9

KOSTRYUKOV, V.N.; KALINKINA, I.N.

Heat capacity and entropy of Mn, Fe, Co, and Ni carbonates at low temperatures. Zhur. fiz. khim. 38 no.3.780-781 Mr '64. (MIRA 17:7)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9

GUMBATOV, D.O.; KOSTRYUKOV, V.N.; SHAULOV, Yu.Kh.

Thermodynamic studies at low temperatures. Izv. AN Azerb. SSR. Ser. fiz.-tekh. i mat. nauk no.1:53-58 '65.

(MIRA 18:6)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9

KOSTRYUKOV, V.N.; GUMBATOV, D.O.

Evaluation of the potential retarding the internal rotation in molecules of some chlorosilanes based on the measurements of heat capacity at low temperatures. Zhur. fiz. khim. 39 no.8:2046-2049 Ag '65. (MIRA 18:9)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9

GUMBATOV, D.O.; KOSTRYUKOV, V.N. (Moskva)

Thermodynamic investigations at low temperatures. Heat capacity, entropy, enthalpy and the value of stopping potential of $C_6H_5I_1Cl_3$. Zhur. fiz. khim. 39 no. 1:116-122 Ja '65 (MIRA 19:1)

1. Submitted April 24, 1964.

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9

L 21139-66 EWT(1)/EWT(m)/EPF(n)-2/EWP(t)/ETC(m)-6 IJP(c) JD/JW
ACC NR: AP6003783 SOURCE CODE: UR/0181/66/008/001/0176/0180

70
69
B

AUTHORS: Kalinkina, I. N.; Kostryukov, V. N.

ORG: Institute of Crystallography AN SSSR, Moscow (Institut kristallografii AN SSSR)

TITLE: Jumps of specific heat in antiferromagnetic carbonates 27

SOURCE: Fizika tverdogo tela, v. 8, no. 1, 1966, 176-180

TOPIC TAGS: specific heat, carbonate, antiferromagnetic material, second order phase transition, transition metal, thermodynamic potential, nickel, iron, manganese, cobalt

ABSTRACT: The authors use earlier experimental results (ZhETF v. 41, 1694, 1961 and v. 43, 2028, 1962; ZhFKh v. 38, 780, 1964) on the carbonates of transition metals ($MnCO_3$, $NiCO_3$, $FeCO_3$, and $CoCO_3$) to calculate the discontinuities of the specific heat during the antiferromagnetic transition. The experimentally observed anomalies near the phase transition point do not agree quantitatively with the discontinuities that follow from the theory of second-order phase

Card 1/2

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9

L 21139-66
ACC NR: AP6003783

transitions. The authors calculated the discontinuity by using different extrapolations of the specific-heat curve from the low-temperature and the high-temperature sides, and using a formula derivable from the theory of the molecular field. The results can be reconciled with the experimental data for all metals except nickel, where the error reaches 20%. The results are used to estimate the coefficients of the expansion of the thermodynamic potential. The authors thank A. S. Borovik-Romanov for useful discussions. Orig. art. has: 6 figures, 6 formulas, and 2 tables.

SUB CODE: 20/ SUBM DATE: 12Jul65/ ORIG REF: 008/ OTH REF: 004

Card 2/2 ULR

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9

ACC NR: AT7003880 (A) SOURCE CODE: UR/0000/66/000/000/0179/0182

AUTHOR: Mamedov, K. K.; Kerimov, I. G.; Kostryukov, V. N.; Guseynov, G. D.

ORG: none

TITLE: Specific heat and entropy of indium monoselenide at low temperatures

SOURCE: AN BSSR. Institut fiziki tverdogo tela i poluprovodnikov. Khimicheskaya svyaz' v poluprovodnikakh i termodinamika (Chemical bond in semiconductors and thermodynamics). Minsk, Nauka i tekhnika, 1966, 179-182

TOPIC TAGS: indium compound, selenide, specific heat, enthalpy, entropy, low temperature research, semiconducting material, chemical bonding

ABSTRACT: In view of lack of investigations on semiconducting compounds of the III - VI type, the authors measured the specific heat of indium selenide, which was shown by earlier experiments to have certain singularities in the structure and character of its chemical bonds. The temperature dependence of the specific heat was measured with an adiabatic calorimetric setup similar to that described earlier (P. G. Strelkov et al., ZhFKh v. 28, no. 3, 459, 1954). The preparation of the sample and the measurement procedure are described in some detail. The specific heats measured for 89 values of the temperature fell all (within one per cent) on a smooth curve, thus indicating the absence of phase transitions or anomalies in the specific heat of this compound in the investigated temperature range (50 - 300K). A table of the values of the entropy and enthalpy, obtained on the basis of the measurement results, is also

Card 1/2 UDC: 541.57

ACC NR: AT7003880

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9

presented. Orig. art. has: 1 figure, 2 formulas, and 2 tables.

SUB CODE: 20/ 07/ SUBM DATE: 20Aug66/ ORIG REF: 008/ OTH REF: 004

Card 2/2

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9

KOSTRYUKOV, V. S.

"Vascularization and Innervation of the Periosteum Under Normal and Certain Pathological Conditions." Cand Med Sci, Khar'kov State Medical Inst, Khar'kov, 1953. (RZhBiol, No 5, Nov 54)

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (11)

SO: Sum. No. 521, 2 Jun 55

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9

L 32894-66 EWT(m)/EWP(j)/T RM/WW

ACC NR: AR6023808 SOURCE CODE: UR/0081/66/000/001/M019/M019

AUTHOR: Vorob'yev, Yu. L.; Kostryukov, V. V.; Krymov, O. I.; Savina, G. G.

ORG: none

TITLE: Corrosion resistance of cements for reinforced concrete shipbuilding

SOURCE: Ref. zh Khimiya (pt. 2), Abs. 1M204

REF SOURCE: Tr. Khar'kovsk. in-ta inzh. zh. d. transp., 1965, vyp. 73, 65-72

TOPIC TAGS: reinforced concrete, cement, corrosion resistance/RVVERB cement

ABSTRACT: The resistance of Sebryakovskii sulfate-resistant portland cement containing 77.3% $3CaO \cdot SiO_2$ and $2CaO \cdot SiO_2$ and 5.8% $3CaO \cdot Al_2O_3$ and the same cement containing 2% $CaCl_2$ and 2% $Al_2(SO_4)_3$ as additions was tested in sea water. The addns. helped expansion and rapid hardening of the concretes and mortars and led to filling of pores in the concrete (cement RVVERB). The order of preparation, storage, and testing of the samples, and the characteristics of the corrosive liquids (synthetic Black Sea and Caspian Sea waters) are described in detail. The concentration of the solns. was 2 and 3 times the natural concentrations. The corrosion resistance was evaluated from the coefficient KC_8 which is equal to the ratio or R_{iz} of the test and control specimens at 8 months age. Cement RVVERB had a high corrosion resistance

Card 1/2

0915 1525

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003

Kostryukova, I. M.

Name: KOSTRYUKOVA, I. M.

Dissertation: A comparative evaluation of methods of treating infestered abortion

Degree: Cand Med Sci

Degree of ~~Affiliation~~: Second Moscow State Medical Inst imeni I. V. Stalin

Publication ~~Defense~~ Date, Place: 1955, Moscow

Source: Knizhnaya Letopis', No 47, 1956

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9

KOSTRYUKOVA, I.M., kand.med.nauk

Dynamics of the opening of the cervix uteri in powerles
Trudy KG no.10:295-297 '63.

Comparative evaluation of the methods for treating a pathological climacteric. Ibid.:298-301 (MIRA 18:1)

1. Iz kafedry akusherstva i ginekologii (zav. kafedroy - prof. I.F.Pantsevich) Kalininskogo gosudarstvennogo meditsinskogo instituta.

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9

KOSTRYUKOVA, I.M., kand.med.nauk; KUSHNIRSKAYA, Ye.S., kand.med.nauk; IGONETS, Z.Ya., assistent

Placental presentation according to five-year data of obstetric institutions in Kalinin. Trudy IGMI no.10:61-63 '63.

1. Iz kafedry akusherstva i ginekologii (zav. kafedroy - prof. I.F.Pantsevich) Kalininskogo gosudarstvennogo meditsinskogo instituta.

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9

P. Tivukova, E. V.

Defense Zapisky Tekhnicha [illegible]
Ser. Khim. Nauk No. 14, 71-78 (1954).—The expansion of [illegible] (at 9°21-4.0°) [illegible] the parabolic [illegible] of the [illegible] $q = Kt$ [illegible] the duration of the [illegible] of K is given by $\log K = [illegible] (4.57T) - 2.725$. Chem.

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9

IPAT'YEV, V.V.; KOSTRYUKOVA, K.V.

Rate of oxidation of iron in hydrogen sulfide at high temperatures. Uch.zap.Len.un. no.175:71-79 '54.(MLRA 9:6)
(Iron) (Oxidation)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9

KOSTRYUKOVA, K. Yu.

"Observations in Vivo of the Formation of the Male Sex Cells in Lilium Martagon L." Dok AN 22, No. 7, 1939.

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9

KOSTRYUKOVA, K. Yu.

"On the Pellicular Layer of the Cytoplasm of the Generative Cell of Convallaria Majalis L." Dok. AN 30, No. 5, 1941. Inst. Biology, Kiev State Univ.

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9

KOSTRYUKOVA, K. Yu.

"Biological Knowledge of the Growth of Pollen Grain" Agrobiol 2, 1948.

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9

KOSTRYUKOVA, K.Yu., professor.

Pollen grains in amaryllidaceae. Nauk.zap.Kiev.un. 7 no.6: 5-18 '48. (MLRA 9:10)

(Amaryllis) (Pollen)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9

KOSTRYUKOVA, K.Yu.

Practice of growing pollen tubes for cytological observations during the lifetime of plants. Nauk.zap.Kiev.un. 8 no.5:5-12 '49. (MLRA 9:10)

(Pollen) (Plant cells and tissues)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9

KOSTRYUKOVA, K. YU.

"Futher contrubution on the spermia of angiospermae." (p. 180)
by Kostryokova, K. Yu.

SO: Journal of General Biology (Zhurnal Obshchei Biologii) Vol. X, No. 3, 1949

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9

KOSTRYUKOVA, K.Yu.

Non-uniformity of spermatozoids, originating from a single pollen tube. Bot. zhur.[Ukr.] 8 no.3:16-30 '51. (MLRA 6:9)
(Fertilization of plants) (Spermatozoa)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9

KOSTRYUKOVA, K. Yu.

Angiosperms

Biological interpretation of the alternation of the generations of angiosperms, Zhur, ob. biol., 12, No. 5, 1951.

9. Monthly List of Russian Accessions, Library of Congress, March 1953, Uncl.

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9

KOSTHYUKOVA, K.Yu.

O.B.Lepeshinskaia's works and the future development of the cellular theory. Bot.zhur.[Ukr.] 9 no.3:6-16 '52. (MLRA 6:11)

1. Kyyivs'kyy medychnyy ordena Trudovoho Chervonoho Prapora instytut im. akademyk Bogomol'tsya, Kafedra biologiyi.
(Lepeshinskaia, Ol'ga Borisovna, 1871-) (Cells)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9

KOSTRYUKOVA, K.Yu.

Comparative cytological investigation of pollen tubes in Lilium martagon on living and fixed material. Biul.Glav.bot.sada no.14:12-23 '52 (MLRA 6:5)

1. Kievskiy botanicheskiy sad imeni akademika Fomina.
(Fertilization of plants)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9

KOSTRYUKOVA, K. YU. Prof.; Gurestskaya, F. S.

Krenke, Nikolai Petrovich, 1892-1939

Several observations on the "Theory of cyclic aging and rejuvenation of plants." by N. P. Krenke. Reviewed by Prof. K. YU. Kostryukova, F. S. Guretskaya. Sel. i sem. 19, no. 8, 1952.

9. Monthly List of Russian Accessions, Library of Congress, October 1953, Uncl.

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9

KOSTRYUKOVA, K.Yu.; GURETSKAYA, F.S.

Amitosis in the embryo sack of the composite Heliopsis helianthoides Sweet. Izv.AN Arm.SSR.Biol.i sel'khoz.nauki 7 no.1:31-45 Ja '54. (MLRA 9:8)

1. Kafedra biologii Kiyevskogo meditsinskogo instituta, Ukrainskaya SSR, Kiyev.

(AMITOSIS) (BOTANY--EMBRYOLOGY)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9

Country :USSR
Category :General Biology. B
Individual Development, Fertilization.
Abs. Jour :RZhBiol., No. 3, 1959, No. 9658

Author :Kostryukova, K. Yu.
Institut. :Kiev University.
Title :The Present State of the Fertilization Theory.

Orig Pub. :Nauk. zap. Kiivs'k. un-t, 1956, 15, No 4, 5-19.

Abstract :The author analyzes the present state of the fertilization theory and criticises the, in her opinion, obsolete concepts of monosperm fertilization, of the predominant role of the nucleus in the fertilization process, etc. The author adheres to the concept of polysperm fertilization in angiospermous plants, rejects, however, the possibility of somatic fertilization. The influence of male elements upon the tissues of female generative organs in angiospermous

Card: 1/2

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9

KOSTRYUKOVA, K.Yu.; GURETSKAYA, F.S. [deceased]

So-called somatic fertilization in plants. Zhur.ob.biol. 17 no.1: 23-31 Ja-F '56. (MIRA 9:6)

1. Kafedra biologii Kiyevskogo meditsinskogo Ordena Trudovogo Krasnogo Znameni insituta.
(FERTILIZATION OF PLANTS)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9

KOSTRYUKOVA, K. Yu.

ALEKSEYENKO, I.P., dots., red.; GARKUSHA, L.V., dots, red.; GURVICH, S.S., dots., red.; KOSTRYUKOVA, K.Yu., prof., doktor biol.nauk, red.; SIROTININ, N.N., prof., red.; FROL'KUS, V.V., dots., red.; TREYGERMAN, I.I., tekhn.red.

[Philosophical problems in medicine and natural sciences] Nekotorye filosofskie voprosy meditsiny i estestvoznaniia; trudy Instituta. Kiev, 1957. 172 p. (MIRA 11:6)

1. Kiyev. Meditsinskiy institut imeni A.A.Bogomol'tsa, 2. Direktor Kiyevskogo ordena Trudovogo Krasnogo znameni meditsinskogo instituta imeni akademika A.A.Bogomol'tsa (for Alekseyenko). 3. Deystvitel'nyy chlen AMN SSSR (for Sirotinin)

(MEDICINE--PHILOSOPHY)
(SCIENCE--PHILOSOPHY)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9

USSR/Cultivated Plants. Decorative Plants. M

Abs Jour : Ref Zhur-Biol., No 15, 1958, 68424

Author : Kostryukova, K. Yu., Boyko, A. P.
Inst : Kiev University.
Title : Observations on the Flowering of the Striped Hippeastrum (Hippeastrum vittatum Herb.).

Orig Pub : Nauk. zap. Kiyvs'k. un-t, 1957, 16, No 1, 13-21

Abstract : In a total number of 35 seedlings, the characteristics of the parental form were found in only two Hippeastrum vittatum seedlings; the remaining seedlings differed greatly from the parental form. Subsequently, five forms were isolated which differ from the

Card : 1/2

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9

KOSTRYUKOVA, K.Yu.

Seed reproduction in so-called viviparous plants. Biul. Glav. bot. sada no.28:76-82 '57. (MIRA 11:1)

1. Botanicheskiy sad Kiyevskogo gosudarstvennogo universiteta im. A.V. Fomina.

(Amaryllis)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9

KOSTRYUKOVA, K.Yu.; BENETSKAYA, G.K.

Does the further development of embryology confirm S.G. Navashin's theory of the independent motion of male gametes in angiosperms. Izv. AN Arm. SSR. Biol. i sel'khoz. nauki 11 no.9:7-24 S '58. (MIRA 11:12)

1.Kafedra biologii Kiyevskogo meditsinskogo instituta. Botanicheskiy sad imeni A.V. Fomina.
(Fertilization of plants) (Lilies)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9

KOSTRYUKOVA, K.Yu.

Vladimir Vasil'evich Finn; obituary. Ukr. bot. zhur. 15 no.2:99-104 '58. (MIRA 11:6)

(Finn, Vladimir Vasil'evich, 1878-1957)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9

KOSTRYUKOVA, K.Yu. [Kostriukova, K.IU.]

Modern data on forms of cellular development [with summary in English]. Ukr.bot.zhur. 15 no.3:90-97 '58. (MIRA 11:12)

1. Kiyevskiy meditsinskiy institut, kafedra biologii.
(CELL DIVISION (BIOLOGY))

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9

KOSTRYUKOVA, K. Yu.

Embryology of Lilium martagon L. Izv. AN Arm. SSR. Biol. nauki 14 no.1:3-16 Ja '61. (MIRA 14:3)

1. Kafedra biologii Kiyevskogo meditsinskogo instituta.
(LILIES) (BOTANY—EMBRYOLOGY)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9

KOSTRYUKOVA, K.Yu.

Fertilization of Heliopsis helianthiodes Sweet. Zhur. ob. biol. 22 no.1:58-65 Ja-F '61. (MIRA 14:1)

1. A.A. Bogomolets Kiev Medical Institute.
(FERTILIZATION OF PLANTS) (HELIOPSIS)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9

KOSTRYUKOVA, K.Yu., prof.

Critical evaluation of the theoretical principles of the chromosome theory of heredity. Nek.filos.vop.med.i est. no.2:83-106 '60. (MIRA 15:7)

1. Kafedra biologii Kiyevskogo meditsinskogo instituta imeni Bogomol'tsa.

(CHROMOSOMES) (HEREDITY)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9

KOSTRYUKOVA, K.Yu.

IAkiv Samuilovych Modylevs'kyi, 1883- . Ukr. bot. zhur. 20 no.3: 110-112 '63. (MIRA 17:9)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9

KOSTRYUKOVA, K.Yu.

IAkov Samuilovich Modilevskii. Bot. zhur. 48 no.7:1071-1073 Jl '63. (MIRA 16:9)

1. Kiyevskiy meditsinskiy institut.
(Modilevskii, Iakov Samuilovich, 1883-)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9

KOSTRYUKOVA, K. Yu.

"Criteres caryologiques dans la systematique des plantes (TAX)."

report submitted for 10th Intl Botanical Cong, Edinburgh, 3-12 Aug 64.

Inst of Medicine, Kiev.

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9

KOSTRYUKOVA, K.Yu.

A new karyotype in lilies. Dokl. AN SSSR 157 no. 2:454-456 Jl '64. (MIRA 17:7)

1. Kiyevskiy meditsinskiy institut imeni A.A.Bogomol'tsa. Predstavleno akademikom T.D.Lysenko.

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9

KOLODYAZHNYY, Vasiliy Il'ich; KOSTRYUKOVA, K.Yu., doktor biol. nauk, prof., otv. red.; VAYNSHTEYN, Sh.I., red.

[Methodological problems in the works of K.A.Timiriazev and the problems of modern biology] Voprosy metodologii v trudakh K.A.Timiriazeva i problemy sovremennoi biologii. Kiev, Naukova dumka, 1965. 249 p. (MIRA 18:9)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9

KOSTRYUKOVA, K.Yu.; CHERNOYAROV, M.V.

Criticism of the theory of the species stability of chromosome numbers in the light of modern scientific data. Agrobiologiia no.4:604-617 Jl-Ag '65. (MIRA 18:11)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9

KOSTRYUKOVA, L. I.

"Development of Methods for Using Synthetic Latexes in the Manufacture of Footwear Cardboard." Sub 27 Mar 47, Moscow Technological Inst of Light Industry imeni L. M. Kaganovich

Dissertations presented for degrees in science and engineering in Moscow in 1947

SO: Sum No. 457, 18 Apr 55

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9

Crude Polymers in General

Synthetic latices in the production of leather substitutes. L. I. KOSTRYNKOVA and I. D. LIESHITS. *Legkaya Prom.*, 1950, No. 1, 26; *Translated Contents Lists of Russian Periodicals*, 1950, No. 13, 33
38610.626X2 1

1950

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9

BARKAN, M.S., kand.tekhn.nauk; KOSTRYUKOVA, L.I., kand.tekhn.nauk; KUZ'MIN, V.V., kand.tekhn.nauk

Improving the preparation and milling of fibrous materials. Leg.prom. 18 no.7:40-43 Jl '58. (MIRA 11:9)
(Leather industry--By-products)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9

BARKAN, Mikhail Sergeyevich; KOSTRYUKOVA, Lidiya Ivanovna; VOYUTSKIY, S.S., prof., doktor khim.nauk, retsenzent; LIVSHITS, I.D., kand. tekhn.nauk, retsenzent; MIHAYEVA, T.M., red.; KNAKNIN, M.T., tekhn.red.

[Use of leather fibers in manufacturing cardboard for shoes] Primenenie kozhevennogo volokna v proizvodstve obuvnykh kartonov. Moskva, Gos.nauchno-tekhn.izd-vo legkoi promyshl., 1959. 129 p. (MIRA 12:12)

(Leather substitutes) (Shoe manufacture)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9

KHOROSHAYA, Ye.S.; KOVRIGINA, G.I.; KOSTRYUKOVA, L.I.; MUSATOVA, M.D.; KOPYL, A.N.; Prinimala uchastiye: KRASNER, Ye.Ia.

Rapid method for determining rubber content of shoe cardboard made from leather fibers bonded with latex. Kozh.-obuv. prom. 5 no.6:31-32 Je '63. (MIRA 16:6)

(Rubber, Artificial—Analysis)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9

KOSTRYUKOVA, I.I., kand. tekhn. nauk; DYN'KINA, M.A., nauchnyy sotrudnik; BELOVA, I.S., nauchnyy sotrudnik

Investigating the process of the drying of shoe cardboard. Nauch.-issl. trudy VNIIPIK no.14:25-48 '63. (MIRA 18:12)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9

KOSTRYUKOVA, M.O.; STRELKOV, P.G.; LANDAU, L.D., akademik.

Thermal capacity of solid oxygen below 4°. Dokl.AN SSSR 90 no.4:525-528 Je '53. (MLRA 6:5)

1. Akademiya Nauk SSSR (for Landau). 2. Institut fizicheskikh problem im. S.I. Vavilova Akademii nauk SSSR (for Kostryukova, Strelkov). (Oxygen)

Conclude that solid oxygen passes over into another class of magnetics between 10 and 4.2° K, but around 10° K is described by the formula $g/X=(1/3)(2\pi mck/en)$ in A. S. Borovik-Romanov's investigation (Zhur Eks i Teor Fiz 21, 1303, 1951), who along with the authors, was the first to construct necessary apparatus to conduct these measurements in the region 4.2-2.5° K. State that the mentioned transition has been studied neutronagraphically by R. F. Ozerov (Usp Fiz nauk 47, 445, 1952). Presented by Acad L. D. Landau 31 Mar 53.

254T106

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9

KOSTRYUKOVA, M.O.

At the Conference on Low Temperature Magnetism at Kharkov, 1-3 July 1954, M.O. KOSTRYUKOVA read a paper on the investigation of the heat capacity and of the temperature dependence of the magnetic susceptibility of dehydrated manganese chloride 4.2° K

SO: AIR INTELLIGENCE INFORMATION REPORT, IR-181-56, 26 Jan 56, Unclassified, jab

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9

USSR/Physics - Magnetic susceptibility FD-996

Card 1/1 Pub. 146 - 20/20

Author : Kostryukova, M. O.

Title : Investigation of the temperature dependence of manganese chloride below 4.2°K

Periodical : Zhur. eksp. i teor. fiz., 27, No 5 (11), 655, 656, Nov 1954

Abstract : The author notes that S. S. Shalyt (ibid., 15, 246, 1945) investigated the magnetic susceptibility of $MnCl_2$ and established that it remains a normal paramagnetic down to 4.2°K. In a recent investigation of the heat capacity of $MnCl_2$ the present author of this work observed an anomaly (with maximum heat capacity at 1.96°K) connected, as can be assumed, with the transition of $MnCl_2$ from the paramagnetic state to the antiferro-magnetic state (Dokl. Akad. Nauk SSSR, 96, 959, 1954). In order to clarify the character of this transition he measured the temperature dependence from 4.2 to 1.4°K. He describes here method of measuring, in which he was assisted by N. Ye. Alekseyevskiy. Acknowledges the interest and advice of P. G. Strelkov.

Institution : Institute of Physical Problems, Academy of Sciences USSR

Submitted : March 13, 1954

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9

KOSTRYUKOVA, M. O.

USSR/Physics

Card : 1/1

Authors : Kostryukova, M. O.

Title : Specific heat of an anhydrous manganous chloride below 4.2°K.

Periodical : Dokl. AN SSSR, 96, Ed. 5, 959 - 961, June 1954

Abstract : The article deals with the determination of specific heat of anhydrous manganous chloride at temperatures between 4.2 - 1.6K°. The experiments were conducted with the help of a vacuum calorimeter. A schematic diagram of this instrument is shown. The results of the experiment are presented on a graph. Five references. Graphs.

Institution : The M. V. Lomonosov State University, The S. I. Vavilov Institute of Physical Problems, Moscow.

Presented by: Academician, L. D. Landau, March 12, 1954

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9

KOSTRYUKOVA, M.O.

"Investigation of the Thermal Capacity of Weakly Magnetic Bodies in the Low Temperature Region." Cand Phys-Math Sci, Moscow Order of Lenin State U imeni M.V. Lomonosov, Moscow, 1955. (KL, No 14, Apr 55)

SO: Sum.No. 704, 2 Nov 55 - Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (16).

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9

Kostryukova, M.O.

Specific heat of solid oxygen between 20° and 40°K.

M. O. Kostryukova

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9

KOSTRYUKOVA, M.O.

Specific heat of solid oxygen between 20 and 40°K. M.

LFH

KOSTRYUKOVA, M.O.

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-

Category : USSR/Atomic and Molecular Physics - Statistical Physics. D 3
Thermodynamics.

Abs Jour : Ref Zhur - Fizika, No 3, 1957, No 6259

Author : Kostryukova, M.O.
Inst : Moscow State University
Title : Specific Heat of Solid Oxygen Between 20 and 4° K.

Orig Pub : Zh. eksperim. i teor. fiziki, 1956, 30, No 6, 1162-1164

Abstract : The measurements of the specific heat C of O_2 below 4°K (Referat Zhur Fizika, 1956, 3718) have been extended towards higher temperatures. In the entire region 4 -- 20° K, the value of C increases smoothly, and deviates insignificantly from a cubic curve. The smooth character of the curve C(T) indicates that the expected anti-ferromagnetic transition (see literature cited) is absent at 4 -- 10° K.

Card : 1/1

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9

27788

152630

S/188/61/000/005/004/006
B117/B102

AUTHORS: Kostryukova, M. O., Leystner, T. A.

TITLE: Specific heat of nickel ferrite in the low-temperature range

PERIODICAL: Moskovskiy Universitet. Vestnik. Seriya III: Fizika, Astronomiya, no. 5, 1961, 68-70

TEXT: The heat specific of nickel ferrite ($NiFe_2O_4$) was measured in the range of 2-20°K by a method similar to that described in Ref. 5 (M. O. Kostryukova, DAN SSSR, 96, 959, 1954; ZhETF, 30, 1162, 1956 (Ref. 6)). The purpose of the investigation was to clarify of the peculiarities of magnetic energy spectra of ferrites in the nickel-zinc system. Specimens of 0.3 mole were produced at the Institut khimii silikatov AN SSSR (Institute of Silicate Chemistry, AS USSR) by sintering. Their x-ray pictures displayed a structure without any complementary lines. The specimens were stoichiometric with an error of some per cent. The x-ray analysis was carried out by L. N. Rastorguyev of the Institut stali (Institute of Steel). To reduce the sorption of the heat-exchanging gas, the specimens were coated with a thin, adhesive film, type БФ (BF). It

Card 1/3

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9

27788

S/188/61/000/005/004/006
B117/B102

Specific heat of nickel ferrite ...

was found that the specific heat of the ferrite at 2°K is three times greater than its magnetic specific heat, and 30 times greater at 10°K. A confrontation of experimental results with those calculated on the basis of the semi-classical spin-wave theory showed no contradiction. The contribution of the magnetic specific heat to the specific heat of the ferrite between 2 and 20°K is very little. A comparison of data obtained for $NiFe_2O_4$ and $FeFe_2O_4$ (Ref. 4, see below) showed that the specific heat of $NiFe_2O_4$ corresponding to lattice vibrations is close to the specific heat of the magnetite lattice. The magnetic specific heat of magnetite, however, exceeds the magnetic contribution to the specific heat of $NiFe_2O_4$ by about 20 times. This peculiarity is presumably connected with the α-β transition in magnetite, occurring at $T_c = 113°K$. A. I. Shal'nikov is thanked for the attention paid to this investigation. There are 2 figures and 7 references: 3 Soviet and 4 non-Soviet. The references to English-language publications read as follows: J. M. Hastings, L. M. Corliss, Rev. Mod. Phys., 25, 114, 1953; H. Kaplan, Phys. Rev., 86, 121, 1952; Ref. 4: J. S. Kouvel, Phys. Rev., 102, 1489, 1956.

Card 2/3

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9

27788

Specific heat of nickel ferrite ... S/188/61/000/005/004/006
B117/B102

ASSOCIATION: Kafedra nizkikh temperatur (Low Temperature Department)

SUBMITTED: January 13, 1961

X

Card 3/3

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9

S/056/61/040/006/008/031
B102/B214

24.2200

AUTHOR: Kostryukova, M. O.

TITLE: The specific heat of nickel-zinc ferrites at low temperatures

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 40, no. 6, 1961, 1638 - 1643

TEXT: The author measured the specific heat of the ferrites $NiFe_2O_4$, $ZnFe_2O_4$, and 0.2 Ni·0.8 $ZnFe_2O_4$ in the temperature range of 1.8 - 20°K in order to be able to find out the magnetic contribution to the specific heat of these ferrites. These ferrites have been studied many times earlier in regard to the transition temperatures and the temperature range in which magnetic orientation of the spin is present. Measurements of the specific heat at low temperatures had so far been carried out only for one ferrite (namely magnetite). The samples studied here were first investigated roentgenographically, and were found to have

Card 1/5

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9

spinel structure (without additional lines). Their composition was almost exactly stoichiometric (allowing for a few per cents). The samples were made at the Institut khimii silikatov AN SSSR (Institute of Silicate Chemistry AS USSR); the roentgenographic analysis was carried out by L. N. Rastorguyev of the Institut stali (Institute for Steel). The results of measurement are shown in Fig. 1. The calculations carried out on the basis of the semiclassical theory of spin waves for ferrites led to the following values for the magnetic specific heat C_{magn} (in cal/mole·deg):

$$C_{\text{магн}} \approx 0{,}113R\,\{2(2S_B - S_A)kT/11J_{AB}S_AS_B\}^{3/2} \approx 0{,}16\cdot 10^{-4}T^{3/2}\ \text{кал/моль}\cdot\text{град},$$

$$kT_{\text{к}} \approx 4\sqrt{2}\,J_{AB}\sigma_A\sigma_B = 36{,}7J_{AB}, \qquad J_{AB} \approx 24{,}5k, \qquad \sigma_N^2 = S_N(S_N+1).$$

S_A and S_B are the mean electronic spins, J_{AB} is the orbital exchange integral between neighboring spins of the two sublattices, $T_{crit} = T_k$

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9

25187
S/056/61/040/006/008/031
B102/B214

The specific heat of nickel-zinc....

was assumed to be 870°K. The specific heat of $NiFe_2O_4$ between 2 and 12°K is given by $C\,[cal/mol \cdot deg] = 0.14 \cdot 10^{-4}T^3 + 0.16 \cdot 10^{-4}T^{3/2}$, where the first term denotes the specific heat due to the lattice vibrations (Θ_D = 321°K), and the second term the specific magnetic heat. The former, called lattice specific heat is very similar to the value obtained for magnetite: $C_{latt} = 0.112 \cdot 10^{-4}T^3$ cal/mol·deg; the magnetic specific heat for magnetite is, however, 20 times higher. $0.2Ni \cdot 0.8ZnFe_2O_4$ showed an anomaly at ~9.7°K. This arises from an antiferromagnetic transition in the zinc ferrite. For this mixed ferrite $C\,[cal/mol \cdot deg] = 4.5 \cdot 10^{-4}T^3 + 2.5 \cdot 10^{-2}T^{3/2}$ in the region 1.8 - 4°K. The zinc ferrite has its maximum specific heat at 9.5°K (3.5 cal/mol·deg). The value of C for it in the region 1.8 - 4°K is given by: $C\,[cal/mol \cdot deg] = 1.8 \cdot 10^{-3}T^3 + 12.1 \cdot 10^{-2}T^{3/2}$. From the results obtained it may be assumed that the magnetic

Card 3/5

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9

25187
S/056/61/040/006/008/031
B102/B214

The specific heat of nickel-zinc....

specific heat in $ZnFe_2O_4$ is due partly to antiferromagnetic ordering and, for a larger part to a complicated form of magnetic orientation (cf. Yafet and Kittel). The author thanks A. S. Borovik-Romanov and A. I. Shal'nikov for their interest and discussions, and Ye. F. Gippius for help. There are 4 figures, 14 references: 5 Soviet-bloc and 9 non-Soviet-bloc. The most important references to Englich-language publications read as follows: Y. Yafet, Ch. Kittel. Phys. Rev., 87, 290, 1952; J. S. Kouvel. Phys. Rev., 102, 1489, 1956; E. F. Westrum, Jr., D. M. Grimes. J. Phys. Chem. Solids, 3, 44, 1957 and 6, 280, 1958.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet (Moscow State University)

SUBMITTED: January 11, 1961

Card 4/5

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9

ACCESSION NR: AP4037570 S/0056/64/046/005/1601/1604

AUTHOR: Kostryukova, M. O.

TITLE: The specific heat of iron chloride at low temperatures

SOURCE: Zh. eksper. i teor. fiz., v. 46, no. 5, 1964, 1601-1604

TOPIC TAGS: specific heat, low temperature, iron compound, antiferromagnetism, calorimeter

ABSTRACT: The specific heat of anhydrous iron chloride was measured between 4 and 1.8K in order to clarify the characteristic features of the temperature dependence of the magnetic specific heat of layered antiferromagnets. The sample was prepared from the hydrated salt $FeCl_2.4H_2O$ by drying in vacuum at temperatures up to 200C, followed by sublimation at ~670C. A 40-gram samples of the anhydrous ferrous chloride, enclosed in a thin-walled quartz ampoule, was placed in a calorimeter whose construction was described earlier (DAN SSSR v. 96,

Card 1/4

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310003-9"