"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9

20195

S/032/61/027/003/015/025
B101/B203

Temper embrittlement of steel ...

is mentioned. There are 3 figures, 3 tables, and 9 references: 6 Soviet-bloc and 3 non-Soviet-bloc.

ASSOCIATION: Institut liteynogo proizvodstva Akademii nauk USSR (Institute of Founding of the Academy of Sciences UkrSSR)

Legend to Fig. 1: a) tempering temperature; b) impact strength

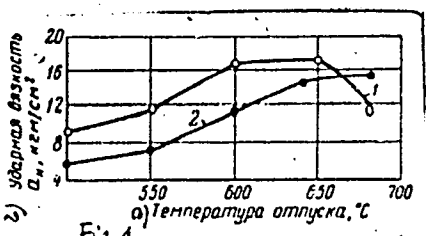

Fig. 1

Fig.1

Card 3/5

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20195

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B101/B203

Temper embrittlement of steel ...

Legend to Table 2: Change in impact strength (a_H, kgm/cm^2) and in impact energy (A_H, kgm) with increasing specimen size: 1) size of specimens, mm; 2) viscous state, 3) specimens were not destroyed but bent to 11°, 4) a crack up to 24 mm long was formed, 5) average, 6) brittle state

1 10×10		15×15		20×20		30×30		40×40	
A_H	a_H	A_H	a_H	A_H	a_H	A_H	a_H	A_H	a_H
2 Вязкое состояние									
11,8	14,8	35,0	20,2	75,0	23,8	250	35,5	3 Образцы не разрушились, а изогнулись до 11°. 4 Наблюдалась слабая трещина длиной до 24 мм	
11,2	13,9	35,0	19,9	75,5	24,1	250	35,1		
11,4	14,2	30,6	18,1	73,0	23,4	248	34,5		
12,1	15,1	34,2	19,8	70,5	22,4	246	34,8		
5 Среднее	14,5		19,5		23,4		35,0		
6 Хрупкое состояние									
8,1	10,1	19,1	11,0	33,0	13,0	121	17,1	216	17,2
7,6	9,5	21,3	12,1	35,5	11,3	117	16,2	205	16,5
8,4	10,4	20,6	11,8	37,0	12,6	109	15,1	218	17,1
7,8	9,8	21,1	12,2	38,5	13,2	116	16,2	221	17,5
5 Среднее	9,9		11,8		12,5		16,2		17,2

Card 4/5

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S/032/61/027/003/015/025
B101/B203

Temper embrittlement of steel ...

Legend to Fig. 2: a) cross section of specimen, mm×mm; b) impact strength

Fig. 2

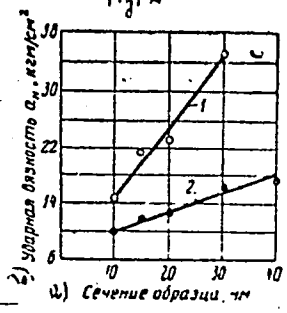

Fig. 2

Card 5/5

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"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9

BRUN, M.P.; KOSTYRKO, O.S.

Reply to IU.E. Bondarev's remarks. Zav.lab. 28 no.6:762 '62. (MIRA 15:5)

1. Institut liteynogo proizvodstva AN USSR.
(Steel—Brittleness)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9

BRAUN, M.P.; KOSTYRKO, O.S.; LITENKO, N.T.; SOKOL, A.N.; VINOKUR, B.B.; MIROVSKIY, E.I.

Steel plasticity in high temperature fields. Izv. vys. ucheb. zav.; chern. met. no.2:57-61 '60. (MIRA 15:5)

1. Ukrainskaya akademiya sel'skokhozyaystvennykh nauk.
(Steel—Testing)
(Metals at high temperature)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9

KOSTYRKO, O.S.; BRAUN, M.P.

Development of temper brittleness during changes in the cross-section of impact test specimens. Struk.i svois.lit.splav. no.1:110-115 '62. (MIRA 15:5)
(Steel--Brittleness) (Metals, Effect of temperature on)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9

BRAUN, M.P., doktor tekhn.nauk, prof.; VINOKUR, B.B., inzh.; KONDRASHEV, A.I., inzh.; KOSTYRKO, O.S., inzh.

Principles of the alloying of steel. Metalloved. i term. obr. met. no.5:26-29 My '62. (MIRA 15:5)

1. Kiyevskiy politekhnicheskiy institut.
(Steel alloys--Metallurgy)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9

S/743/62/000/001/007/008

AUTHORS: Kostyrko, O.S., Braun, M.P.

TITLE: The development of temper brittleness upon a change in the sectional magnitude of impact specimens.

SOURCE: Struktura i svoystva litykh splavov. no.1. Inst. lit. proizv. AN USSR. Kiev, Izd-vo AN UkrSSR, 1962, 102-115.

TEXT: The paper reports the results of an experimental investigation intended to obtain more complete data on the dependence of the notch-toughness on the scale factor in conditions of geometric similarity and structural equality of the specimens studied and with the specimen in a state of reversible temper brittleness or in its absence. The specimens were made of rolled billets of 40XH (40KhN) steel. The billets of the impact specimens were first annealed at a temperature of 1,100°C for 3 hrs to obtain uniform grain structure and were quenched in oil from a temperature of 1,000°C. Tests reported in Zavodskaya laboratoriya, v.27, 1961, 318, show that the specimens were fully hardened across their thickness. Upon 2-hr tempering at 570°, one-half of the specimens were cooled in water, the other half in the furnace at a rate of 10°C/hr. H_{R_C} of the specimens ranged within 25-27. Notch-toughness tests were performed at T from +200 to −180°C. The tabulated and graphed test data show that, with an increase in the size of the specimen, the level of notch-toughness increases both for steel heat-treated for reversible temper

Card 1/2

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brittleness and for steel not subjected to such treatment. With increasing specimen size the notch-toughness increases significantly more intensely in the absence of reversible temper brittleness than in its presence. The increases in notch-toughness occur according to a linear law. The character of the change of the curves and the appearance of the fracture does not suggest a displacement of the critical transition temperature in the brittle state toward higher T's with increasing specimen size. If we define the cold-brittleness threshold as corresponding to a 50% decrease in toughness, then the magnitude of the cold-brittleness interval approximates 75°C. A comparison with the planimetric method yields similar results. The dependence of the impact work on the deformation characteristic Δb has a rectilinear character. The deformation characteristic Δb increases in magnitude with increasing specimen size, both in the presence and in the absence of reversible temper brittleness. The coefficient of proportionality, $K=A_k/\Delta b$, grows in absolute value with a growth in specimen size; however, the ratio $K_{furnace}/K_{water}$ changes but insignificantly. There are 3 figures, 2 tables, and 15 references (10 Russian-language Soviet, 2 German, 1 Swedish, and 2 English-language).

ASSOCIATION: Institut liteynogo proizvodstva, AN USSR (Institute of Casting Production, AS UkrSSR).

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9

BRAUN, Mikhail Petrovich; VINOKUR, Bertol'd Bentsionovich; CHERNYY, Viktor Gavrilovich; CHERNOVOL, Arkadiy Vasil'yevich; KOSTYRKO, Oleg Stepanovich; ALEKSANDROVA, Natal'ya Pavlovna; KRUKOVSKAYA, Galina Nikolayevna; TIKHONOVSKAYA, Larisa Dmitriyevna; LYASHENKO, Lyudmila Aleksandrovna; FIKSEN, N.V., kand. tekhn. nauk, otv. red.; POKROVSKAYA, Z.S., red.; KADASHEVICH, O.A., tekhn. red.

[Alloys with addition elements] Legirovannye splavy. [By] M.P. Braun i dr. Kiev, Izd-vo AN Ukr.SSR, 1963. 142 p. (MIRA 16:8)

(Alloys--Metallurgy)
(Foundries--Equipment and supplies)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9

BRAUN, M.P., doktor tekhn. nauk; KOSTYRKO, O.S., inzh.

Effect of dimensions of heat-treated specimens on the impact toughness of 40KhNL steel. Mashinostroenie no.3:24-26 My-Je '63. (MIRA 16:7)

(Steel--Testing)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9

BRAUN, Mikhail Petrovich; VINOKUR , Bertol'd Bentsionovich; CHERNOVOL, Arkadiy Vasil'yevich; CHERNYY, Viktor Gavrilovich; ALEKSANDROV, Anatoliy Grigor'yevich; KOSTYRKO, Oleg Stepanovich; ALEKSANDROVA, Natal'ya Pavlovna; LYASHENKO, Lyudmila Aleksandrovna; MATYUSHENKO, Nelli Ivanovna; FIKSEN, N.V., kand. tekhn. nauk, otv. red.; POKROVSKAYA, Z.S., red.; DAKHNO, Yu.B., tekhn. red.

[Structural and heat-resistant alloys] Konstruktsionnye i zharoprochnye splavy. Kiev, Izd-vo AN USSR, 1963. 149 p. (MIRA 17:3)

1. Akademiya nauk URSR, Kiev. Instytut lyvarnoho vyrobnytstva.

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"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9

L 23363-65 EWT(m)/EWP(w)/EWA(d)/T/EWP(t)/EWP(b) JD

ACCESSION NR: AR5000599 S/0137/64/000/008/I065/I065

SOURCE: Ref. zh. Metallurgiya. Sv. t., Abs. 8I413

AUTHOR: Braun, M. P.; Vinokur, B. B.; Kondrashev, A. I.; Kostyurko, O. S.

TITLE: The problem of the principles of alloying steel

CITED SOURCE: Sb. Legirovaniye staley. Gostekhizdat USSR, 1963, 253-260

TOPIC TAGS: alloying, steel, steel alloying, steel hardening, metal ductility, metal brittleness, metal grain structure

TRANSLATION: In the works of A. P. Gulyaev (RZhMet, 1961, 12D344) there is a discussion of the effect of alloying on certain properties of steel. He proposes to divide steels into 7 categories according to $sigma_b$; this means that various steels in the same $sigma_b$ group could differ substantially in the most important rated characteristic, $sigma_s$. A. P. Gulyaev incorrectly thinks that alloying is basically necessary only for the attainment of the required hardenability,

Card 1/2

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"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9

L 23363-65

ACCESSION NR: AR5000599

Much work has been carried out recently which refutes this principle. According to A. P. Gulyaev's data, excessive alloying causes a worsening of dynamic ductility, but with an increase in the addition of nickel in alloying there is an improvement in a_k. A. P. Gulyaev incorrectly considers molybdenum as the only element which suppresses brittleness in tempering. It is proposed that tungsten be added to steels in small quantities to improve hardenability. High ductility and a low threshold of cold brittleness, in the opinion of A. P. Gulyaev, can be improved only when a fine truly austenitic grain structure is preserved. The grain fineness of the structure has a considerable effect on ductility, but the decisive factor is the alloying. To obtain a fine grain structure, A. P. Gulyaev proposes to introduce 1 kg aluminum and 3-4 kg titanium per ton of steel, but such an amount of aluminum is excessive because it has such a marked bad effect on the fluidity of the metal. The titanium content should be increased slightly, calculating a 50% loss. The same applies to niobium, vanadium, and zirconium. The addition of these elements should be made in amounts from 0.1 to 0.3%. The alloying of steel with rare earth elements has only a modifying effect and does not bring about any marked improvement in hardenability. L. Koblikova

Card 2/2 SUB CODE: MM ENCL: 00

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"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9

BRAUN, Mikhail Petrovich; VINOKUR, Bertol'd Bentsionovich; CHERNOVOL, Arkadiy Vasil'yevich; CHERNYY, Viktor Gavrilovich; ALEKSANDROV, Anatoliy Grigor'yevich; KOSTYRKO, Oleg Stepanovich; ALEKSANDROVA, Natal'ya Pavlovna; LYASHENKO, Lyudmila Aleksandrovna; MATYUSHENKO, Nelli Ivanovna; FIKSEN, N.V., kand. tekhn. nauk, otv. red.; POKROVSKAYA, Z.S., red.

[Structural and heat-resistant alloys] Konstruktsionnye i zharoprochnye splavy. Kiev, Izd-vo AN USSR, 1963. 149 p. (MIRA 17:3)

1. Akademiya nauk URSR, Kiev. Instytut liteynogo proizvodstva.

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9

L 35049-65 EWT(m)/EWP(w)/EWA(d)/T/EWP(d)/EWP(b) JD

ACCESSION NR: AR5006377 S/0276/64/000/012/G008/G008 17 B

SOURCE: Ref. sb. Tekhnologiya mashinostroyeniya. Svodnyy tom, Abs. 12G36

AUTHOR: Braun, M. P.; Vinokur, B. B.; Kondrashev, A. I.; Kostyrko, O. S.

TITLE: The principles of steel alloying (Comments on the hypotheses of A. P. Gulyayev)

CITED SOURCE: Sb. Legirovaniye staley. Kiyev, Gostekhizdat USSR, 1963, 253-260

TOPIC TAGS: steel alloying, steel property

TRANSLATION: The authors present a critique of the basic theorems proposed by A. P. Gulyayev concerning the effects of alloying on some properties of steels. Bibl. with 6 titles. L. Koblikova.

SUB CODE: MM ENCL: 00

Card 1/1

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9

YEFIMOV, V.A., doktor tekhn. nauk; LUZAN, P.P., kand. tekhn. nauk; KHAN, B.Kh., kand. tekhn. nauk; KOSTYUKO, O.S., kand. tekhn. nauk

Scientific and technical conference on the theory and practice of founding processes. Lit. proizv. no.12:33-34 D '65. (MIRA 18:12)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9

KOSTYRKO, Pavel; SHALAT, Tibor [Salat, Tibor]

On functions whose graphs are closed sets. Cas pro pest mat 89 no. 4:426-432 O '64.

1. Comenius University, Bratislava, Smeralova 2. Submitted August 7, 1963.

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9

KOSTYRKO, V.F.

Class of reducibility of $\forall\exists\eta$. Alg. i log. 3 no.5/6:45-55 '64. (MIRA 18:6)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9

KOSTYRKO, V.F.

The Entscheidungsproblem for an Ackermann case. Sib.mat.zhur. 6 no.2:342-363 Mr-Ap '65. (MIRA 18:5)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9

KOSTYRKO, V.F.

Error in I.I.Zhegalkin's article "The decidability problem in finite classes." Alg. i log. 1 no.5:31-36 '62.

(MIRA 18:1)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9

KOSTYRKO, V.P.

Several problems in developing the economy of TSelinograd Province. Trudy Otd. geog. AN Kazakh. SSR no.10:195-199 '63. (MIRA 16:10)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9

KOSTYRKO, V. P. Cand Geog Sci -- (diss) "Akmolinskaya Oblast.(Economic geographic description)." Alma-Ata, 1959. 20 pp (Min of Education RSFSR. Mos State Ped Inst im V. I. Lenin), 150 copies (KL, 45-59, 144)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9

KOSTYRKO, V. P.

Cand Geog Sci - (diss) "South of the virgin border. (Rayony subordinate to the Krayinspolkom). Modern economy. Problems of the rational utilization of natural and economic resources." Alma-Ata, 1961. 19 pp; (Ministry of Education RSFSR, Moscow State Pedagogical Inst imeni V. I. Lenin); 300 copies; price not given; (KL, 5-61 sup, 178)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9

SACEWICZ, J.; KOWALSKI, J.; GIZMAJER, A.; KOSTYRKOWA, K.

Survey of books and articles. Pomiary 10 no. 1: Supplement: Przegl dokum metrol 14 no. 1: 47-48 Ja '64.

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"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9

KOSTYRKOWA, K., mgr

Hygrometric diagrams set nomographically. Pomiary 9 no.2:94-95 F '63.

1. Laboratorium Pomiarow Wilgotnosci, Glowny Urzad Miar, Warszawa.

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9

KOSTYRYA, I.S., pediatr (Gorlovka, Donbass)

Why doesn't this concern you? Zdorov'e 6 no.3:20-21 Mr '60. (MIRA 13:5)

(PEDIATRICS)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9

KOSTYRYA, Vyacheslav Afanas'yevich

[Encounters; sketches about people of the new Uzbekistan] Vstrechi; ocherki o liudiakh novogo Uzbekistana. Tashkent, Goslitizdat UzSSR, 1958. 161 p. (MIRA 12:11)
(Uzbekistan)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9

RUSLOV, V.N.; KOSTYRYA, V.A.

Sampler for glass batch sampling in depth. Stek. i ker. 22 no.3:39-40 Mr '65. (MIRA 18:10)

1. Nauchno-issledovatel'skiy institut Avtosteklo (NIIAvtosteklo).

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9

KOSTYRYA, Viktor Yakovlevich; SVYATITSKAYA, K.P., vedushchiy redaktor; MUKHINA, E.A., tekhnicheskiy redaktor

[My experience in sharpening drills] Moi opyt zatochki sverl. Moskva, Gos. Nauchno-tekhn. izd-vo neft. i gorno-toplivnoi lit-ry, 1956. 14 p. (MLRA 10:6)

1. Master groznenskogo mashinostroitel'nogo zavoda "Krasnyy molot" (for Kostyrya)
(Drilling and boring machinery)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9

L 29142-66 EWT(1)/FCC GW

ACC NR: AP6018684 SOURCE CODE: UR/0050/66/000/003/0037/0040

AUTHOR: Kostyryachenko, E. I.

ORG: Leningrad Hydrometeorological Institute (Leningradskiy gidrometeorologicheskiy institut)

TITLE: Analysis of atmospheric fronts on a surface weather chart

SOURCE: Meteorologiya i gidrologiya, no. 3, 1966, 37-40

TOPIC TAGS: atmospheric front, meteorology

ABSTRACT: Even experienced weathermen experience great difficulties in analysis of fronts and important errors are made. This is because the identification and analysis of fronts is based primarily on qualitative physical conclusions. This paper represents an effort to find relatively simple parameters which would make it possible to identify the position of atmospheric fronts on surface charts objectively, by performing certain definite computations. The study was made using cases when fronts were clearly expressed and could be clearly analyzed; then the computations were made using unanalyzed charts so that the position of the frontal lines was unknown at the time of computations. It is shown that a variety of characteristics and their combinations can be useful in an analysis of fronts. However, the clearest relationships of the position of the frontal lines were obtained with the isolines $\Delta p = \frac{\partial^2 p}{\partial x^2} + \frac{\partial^2 p}{\partial y^2}$ which can be drawn by the method described in the paper. The frontal lines pass through the centers of the maximum values delta p and along the axes of ridges extending from these centers. Orig. art. has: 2 figures. [JPRS]

SUB CODE: 04 / SUBM DATE: 26Jun65 / ORIG REF: 001

Card 1/1 UDC: 551.509.3

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9

KOSTYSHENKOV, S.N., inzhener.

Operation of SEU-4 electrolytic installations. Elek.sta. 27 no.4: 29-31 Ap '56. (MLRA 9:8)
(Electrolysis) (Hydrogen)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9

VOROB'YEV, A.I.; KOSTYSHEV, N.M. (Novosibirsk); MYAKISH, N.N., inzh. (Novosibirsk)

Experience in mechanized track testing. Put' i put.khoz. 7 no.12:8-11 '63. (MIRA 16:12)

1. Rukovoditel' puteispytatel'noy laboratorii Novosibirskogo instituta inzhenerov zheleznodorozhnogo transporta (for Vorob'yev).

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9

MUSTAFAYEV, M.M.; CHERNOMORDIKOV, M.Z.; KAFAROV, S.A.; KOSTYSHEVA, A.V.

Intensive air injection into layer 5 of the Bibi-Eybat field.
Azerb.neft.khoz. 38 no.1:25-28 Ja '59. (MIRA 12:4)
(Apsheron Peninsula--Secondary recovery of oil)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9

RITS, I.A., kand. med. nauk, (Novosibirsk, Kannskaya ul., d. 11, kv.7)
KOSTYSHEVA, S.N.

Gastric tuberculosis. Vestn. khir. Grekov. 90 no.4:91-92 Ap'63 (MIRA 17:2)

1. Iz Novosibirskoy oblastnoy klinicheskoy bol'nitsy (glavnyy vrach - zasluzhennyy vrach RSFSR Z.A. Kireyeva).

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9

KOSTYSHEVA, A.V.; GUSEYNOV, T.M.; VEZIR-ZADE, F.A.

Hydrochemical characteristics of the layer 5 in the Bibi-Eybat field and changes in the chemical composition of formation waters resulting from the injection of sea water. Azerb. neft. khoz. 39 no.10:7-9 O '60. (MIRA 13:10)

(Oil field brines) (Sea water)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9

YAKOVENKO,I.I.; KOSTYSHIN, A.T.

Report on the activities of the Kherson Provinsial Scientific Society of Otorhinolaryngologists for 1962. Zhur. ush., nos. i gorl. bol 23 no.5:93-94 S-O'63 (MIRA 17:3)

1. Predsedatel Khersonskogo oblastnogo nauchnogo obshchestva otolaringologov (for Yakovenko). 2. Sekretar' Khersonskogo oblastnogo nauchnogo obshchestva otolaringologov (for Kostyshin).

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9

BEZRUKOVA, A.A.; KOSTYSHIN, A.T.

Case of unusually large middle nasal conchae. Zhur. ush., nos. i gor. bol. 24 no.1:86 Ja-F '64. (MIRA 18:3)

1. Iz otorinolaringologicheskogo otdeleniya (zav. - A.A. Bezrukova) 2-y gorodskoy bol'nitsy g. Khersona.

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9

KOSTYSHIN, M. T.

KOSTYSHIN, M. T. -- "The Development of a Method and the Measurement of the Dispersion of the Thin Layers of Selenites and Sulfides of Certain Metals in the Infrared Part of a Spectrum." Min Higher Education Ukrainian SSR, Kiev State U imeni T. G. Shevchenko, Kiev, 1956. (Dissertation for the Degree of Candidate in PHYSICOMATHEMATICAL SCIENCES).

SO: KNIZHNAYA LETOPIS' (Book Register), No. 42, October 1956, Moscow.

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9

KOSTYSHIN, M.T. [Kostyshyn, M.T.]

Graphic determination of interference orders. Nauk povid. KDU no.1:27-28 '56. (MIRA 11:4)
(Interference (Light))

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9

KOSTYSHIN, M.T.

25(6) PHASE I BOOK EXPLOITATION SOV/2455

Nauchno-tekhnicheskoye obshchestvo priborostroitel'noy promyshlennosti. Ukrainskoye respublikanskoye pravleniye

Novyye metody kontrolya i defektoskopii v mashinostroyenii i priborostroyenii [doklady Respublikanskoy konferentsii] (New Methods of Inspection and Flaw Detection in the Machinery and Instrument-manufacturing Industries [Reports of the Conference Held at Kiyev, 1956]) Kiyev, Gostekhizdat USSR, 1958. 264 p. 4,700 copies printed.

Sponsoring Agency: Akademiya nauk USSR.

Ed.: A. Amelin; Tech. Ed.: P. Patsalyuk; Editorial Board: I.I. Greben', B.D. Orozin, A.Z. Zhmudskiy, G.N. Savin (Resp. Ed.), I.D. Faynerman (Dep. Resp. Ed.), and A.A. Shishlovskiy.

PURPOSE: This book is intended for engineers, scientific workers, and technicians dealing with problems of inspection and flaw detection.

COVERAGE: This is a collection of scientific papers presented at a

Card 1/9

conference sponsored by the Academy of Sciences, UkrSSR, and the Nauchno-tekhnicheskoye obshchestvo priborostroitel'noy promyshlennosti, Ukrainskoye pravleniye (Ukrainian Branch, Scientific and Technical Society of the Instrument-manufacturing Industry). The papers deal with modern methods of inspection and flaw detection used in the machinery- and instrument-manufacturing industries. The subjects discussed include the use of electron microscopes in the investigation of metal surfaces; X-ray, gamma-ray, luminescense, magnetic, and ultrasonic methods of flaw detection; use of radioactive isotopes; X-ray diffraction methods of metal analysis; and the use of interferometers for measuring length and thickness and determining the coefficient of linear thermal expansion. No personalities are mentioned. References follow several of the papers.

Gurevich, A.K., Engineer, Leningrad NII of Bridges. Ultrasonic Detection of Flaws in Fillet Welds 143

Khimchenko, M.V., V.P. Vasilevskiy, Engineer, and V.A. Tsaenal', Engineer, Kiyev Electric Welding Institute imeni Ye.O. Paton. Ultrasonic Detection of Flaws in Electro-slag Welds 149

Trushchenko, A.A., Engineer, Kiyev Electric Welding Institute imeni Ye.O. Paton. Testing Welds for Permeability 161

Rominova, M.P., Doctor of Technical Sciences, Professor Leningrad VNII imeni Mendeleyev. Ways of Improving the Accuracy of the Interference Method of Measuring Length 173

Kostyshin, M.T., and A.A. Shishlovskiy, Kiyev State University imeni Shevchenko. Use of MII Microinterferometers for Determining Thicknesses and Refractive Indexes 180

Volkova, Ye. A., Candidate of Technical Sciences, Leningrad VNII imeni Mendeleyev. Interference Method of Measuring the Coefficient of Linear Thermal Expansion of Solid Bodies 188

Card 6/ 9

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9

AUTHOR: Kostyshin, M.T. SOV/51-5-1-12/19

TITLE: The Infrared Dispersion of Sulphides and Selenides of Certain Metals (Dispersiya sul'fidov i selenidov nekotorykh metallov v infrakrasnoy oblasti spektra)

PERIODICAL: Optika i Spektroskopiya, 1958, Vol 5, Nr 1, pp 71-77 (USSR)

ABSTRACT: The author used samples 10-100 μ thick produced mainly by vacuum condensation. These films were deposited on rock salt, sylvite and fluorite. Interference of infrared light was observed in a convergent beam. The order of interference was found by the method described in Ref 3. When the order of interference was known, the relative refractive index could be found. To find the absolute values of the refractive index it was necessary to find the film thickness; this was done using a microinterferometer MII-1 as described in Ref 4. To check the results obtained, dispersion of certain of the substances studied was measured up to the visible region where the refractive index could be measured by independent method. In the region 0.7-1 μ the interference measurements were made using spectrophotometer SF-4,

Card 1/2

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"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9

SOV/51-5-1-12/19

The Infrared Dispersion of Sulphides and Selenides of Certain Metals

while in the region 1-15 μ a spectrometer VIKS-M2 was used. The dispersion curve obtained using these two instruments in the infrared agreed well with the visible-region dispersion curve at the transition between the two spectral regions. The results of independent measurements of the refractive index using the MII-1 microinterferometer were found to be identical with the results obtained by the interference method used by the author. The results obtained are given in Figs 1-6. Fig 1 gives the dispersion curve for selenium, Fig 2 for PbSe, Fig 3 for $SnSe_2$ (curve 1) and SnSe (curve 2). Fig 4 for CdS (curve 1) and CdSe (curve 2), Fig 5 for As_2S_3 (curve 1) and As_2Se_3 (curves 2 and 3), and Fig 6 for Sb_2S_3 (curves 1 and 2) and Sb_2Se_3 (curve 3). The author thanks A.A. Shishlovskiy who directed this work. There are 6 figures and 18 references, of which 7 are English, 5 Soviet, 3 American, 1 German, 1 French and 1 Japanese.

ASSOCIATION: Kiyevskiy gosudarstvennyy universitet (Kiyev State University)

SUBMITTED: September 16, 1957

Card 2/2

1. Metal sulfide films-Spectra 2. Metal sulfide films-Refractive index
3. Metal selenide films-Spectra 4. Metal selenide films-Refractive index
5. Infrared spectroscopy-Applications 6. Interferometers-Applications
7. Spectrum analyzers-Applications

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9

AUTHOR: Kostyshin, M.T. SOV/51-5-3-15/21

TITLE: The Optical Constants of Germanium in the 2-25μ Region (Opticheskiye postoyannyye germaniya v oblasti 2-25μ)

PERIODICAL: Optika i Spektroskopiya, 1958, Vol 5, Nr 3, pp 312-315 (USSR)

ABSTRACT: Brattain and Briggs (Ref 1) were the first to study the optical constants of germanium. They showed that the absorption limit lies in the near infrared. More precise measurements of absorption (Ref 2) showed that at wavelengths longer than 2 μ germanium is exceptionally transparent. The transmission curves of very pure germanium obtained by Briggs (Ref 3) is shown in Fig 1 for the region 1-25 μ. Fig 2 gives the optical constants of germanium in the region 2-25μ. Curves 1-4 represent the refractive index. Curve 1 represents Briggs's measurements (Ref 1); curve 2 was obtained by the present author by an interference method whose details are not given; curve 3 shows Simon's measurements (Ref 6) who used a photometric method; curve 4 shows the results of calculation based on photometric transmission data of Ref 3. Curve 5 of Fig 2 gives the absorption coefficient calculated by the method described in the

Card 1/2

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"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9

The Optical Constants of Germanium in the 2-25 μ Region SOV/51-5-3-15/21

present paper using the experimental results of Ref 3. The author discusses two methods of avoiding the effect of the refractive index on the value of the absorption coefficient (and vice versa) in calculations of these quantities from experimental data. One of these methods, based on the transmission data for two layers, was applied to the results of Ref 3. The calculated refractive index (curve 1) and absorption coefficient (curve 2) are shown in Fig 3 for the region 11-25 μ. There are 6 references.

ASSOCIATION: Kiyevskiy gosudarstvennyy universitet im. T.G. Shevchenko (Kiyev State University imeni T.G. Shevchenko)

SUBMITTED: October 14, 1957

Card 2/2 1. Germanium--Optical properties 2. Mathematics--Applications

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9

24,7408

S/051/62/012/005/013/021
E032/E514

AUTHORS: Kostyshin, M.T. and Romanenko, P.F.

TITLE: Dispersion of some semiconductors in the region of absorption bands

PERIODICAL: Optika i spektroskopiya, v.12, no.5, 1962, 627-631

TEXT: The authors describe a method of measuring the refractive index as a function of wavelength of solid amorphous bodies in the region of absorption bands. The specimen is in the form of a wedge which is set up in front of the exit slit of a monochromator. The refractive index is deduced from measurements on the interference patterns obtained by reflection from the wedge. The method is particularly suitable for substances in which the ratio of the refractive index to the absorption coefficient is of the order of 3. The method has been successfully used to determine the refractive index as a function of wavelength in the range 400 - 1000 mμ for Se, $SnSe_2$, $SbSe_3$ and stibnite. There are 6 figures.

SUBMITTED: April 6, 1961

Card 1/1

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9

KOSTYSHIN, M.T.; ROMANENKO, P.F.

Dispersion of certain semiconductors in the region of absorption bands. Opt.i spektr. 12 no.5:627-631 My '62. (MIRA 15:5)
(Semiconductors--Spectra)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9

KOSTYSHYN, M.T

S/185/63/008/001/015/024
D234/D308

AUTHORS: Kostyshyn, M. T. and Romanenko, P. F.

TITLE: Some optical properties of orpiment and stibnite

PERIODICAL: Ukrayins'kyy fizychnyy zhurnal, v. 8, no. 1, 1963, 102-105

TEXT: The authors give the results of measurements of absorption coefficients of thin layers of As_2S_3 obtained by evaporation, for 250 - 500 mμ. The absorption coefficient increases smoothly up to 4.2 ev (= about 300 mμ). Single crystals in polarized light, whose electric vector is parallel to the c axis of the crystal, have two absorption maxima at 457 and 436 mμ. If the electric vector is perpendicular to the c axis there is one maximum at 431 mμ. Reflection spectra of orpiment and stibnite in unpolarized light were also measured. The former has maxima at 4.35 and 5.0 ev, the latter at 4.9 ev (distinct, due probably to direct transitions) and at 3.9 ev (blurred, owing probably to indirect transitions). There are 3 figures.

Card 1/2

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"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9

Some optical properties ... S/185/63/008/001/015/024
D234/D308

ASSOCIATION: Kyyivs'kyy derzhuniversytet im. T. H. Shevchenka (Kiev State University im. T. H. Shevchenko)

SUBMITTED: July 27, 1962

Card 2/2

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9

KOSTYSHIN, M.T. [Kostyshyn, M.T.]; ROMANENKO, P.F.

Study of the long-wave boundary of the self-absorption band in orpiment. Ukr. Fiz. zhur. 9 no.2:166-171 F'64 (MIRA 17:7)

1. Kiyevskiy gosudarstvennyy universitet imeni Shevchenko.

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9"

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L 13371-66 EWT(1)/EWP(e)/EWT(m)/T/EWP(t)/EWP(b)/EWA(h) IJP(c) JD/AT/WH
ACC NR: AP5028146 SOURCE CODE: UR/0077/65/010/006/0450/0451

AUTHOR: Kostyshin, M. T.; Mikhaylovskaya, Ye. V.; Sandul, G. A.; Romanenko, P. F.

ORG: Institute of Semiconductors AN UkrSSR (Institut poluprovodnikov AN UkrSSR)

TITLE: Photosensitivity of thin semiconductive layers 21,44,55 36

SOURCE: Zhurnal nauchnoy i prikladnoy fotografii i kinematografii, v. 10, no. 6, 1965, 450-451

TOPIC TAGS: photosensitivity, visible light, semiconducting material

ABSTRACT: CuCl was found to have the same photosensitivity properties as are exhibited by PbI_2. When deposited in thin layers on quartz or glass, these compounds form latent images upon exposure to visible light. These images may be developed on heating. Temperatures required are 180-240°C for PbI_2 and 150-200°C for CuCl. If heated to these temperatures during exposure, the latent images appear on subsequent exposure to radioactivity. The source of light may also serve as the source of heat in developing the latent image. It was shown that other halides are also light sensitive. Compounds of sulfur (As_2S_3, Sb_2S_3, CdS, PbS), selena (As_2Se_3) and

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ACC NR: AP5028146

tellurite (ZnTe) are similarly photosensitive. Light sensitive layers are produced by vacuum deposition at pressures on the order of 10^{-4}-10^{-5} cm Hg. The layers are exposed for a period of from a few minutes to an hour. They are then heated in an oven for from 5-10 minutes, at temperatures between 100°C and 200°C. The reaction apparently takes place as a result of the rupture of the electronic bonds of CuCl. The cuprous and chloride ions react in pairs in the defects of the crystal lattice and form molecules of chlorine and copper. The atoms of copper are trapped in the lattice forming the resultant visible image. Heating accelerates the rupture of the bonds of CuCl. By selecting appropriate semiconductive material, layers can be produced which are sensitive to various portions of the spectrum. Applications may be found in microphotography. Orig. art. has: 2 figures.

SUB CODE: 20/ SUBM DATE: 25Jun65/ ORIG REF: 000/ OTH REF: 003

Card 2/2 mc

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9

KOSTYSHIN, S.S.; MOLOTKOVSKIY, G.Kh.

Effect of different photoperiods on the content of protein, sugars and dry substance in leaves and roots of corn hybrid between the Bukovina 3 and its parental forms. Nauch.dokl.vys.shkoly; biol. nauki no.3:145-148 '65. (MIRA 18:8)

1. Rekomendovana kafedroy fiziologii rasteniy Chernovitskogo gosudarstvennogo universiteta.

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9

ROSTYSHIN, V.A., polkovnik [illegible]

Publication of the work [illegible] Great Patriotic War, [illegible]." [illegible] 1[illegible]4.
([illegible] 18:7)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9

ZHAROVSKII, F.G.; KOSTYSHINA, A.P.

Colorimetric determination of phosphorus in steel by extraction. Ukr.khim.zhur. 19 no.2:201-204 '53. (MLRA 7:4)
(Phosphorus) (Colorimetry) (Steel--Analysis)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9

KOSTYSHINA, A.P.

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9

KOSTYSHINA, A. P.

Category: USSR/Analytical Chemistry - General Questions. G-1

Abs Jour: Referat Zhur-Khimiya, No 9, 1957, 30935

Author : Pyatnitskiy I. V., Kostyshina A. P.
Inst : not given
Title : Polarographic Determination of Copper and Bismuth in Tartaric Acid Solution

Orig Pub: Ukr. khim. zh., 1956, 22, No 5, 679-686

Abstract: Potentiometric study of the composition and stability of tartaric acid complexes (TC) of Bi and Cu, and description of a method that has been developed for a polarographic determination of Bi and Cu in tartaric acid solution. Composition of TC of Bi and Cu was determined at different concentrations of tartaric acid and constant pH. It was found that in the tartaric acid complexes of Bi and Cu one atom of the metal is combined with one or with two residues of tartaric acid. Equilibrium constant of the reaction of Bi-complex formation was calculated ($K = 2.2 \cdot 10^{-6}$) and also the instability constant of

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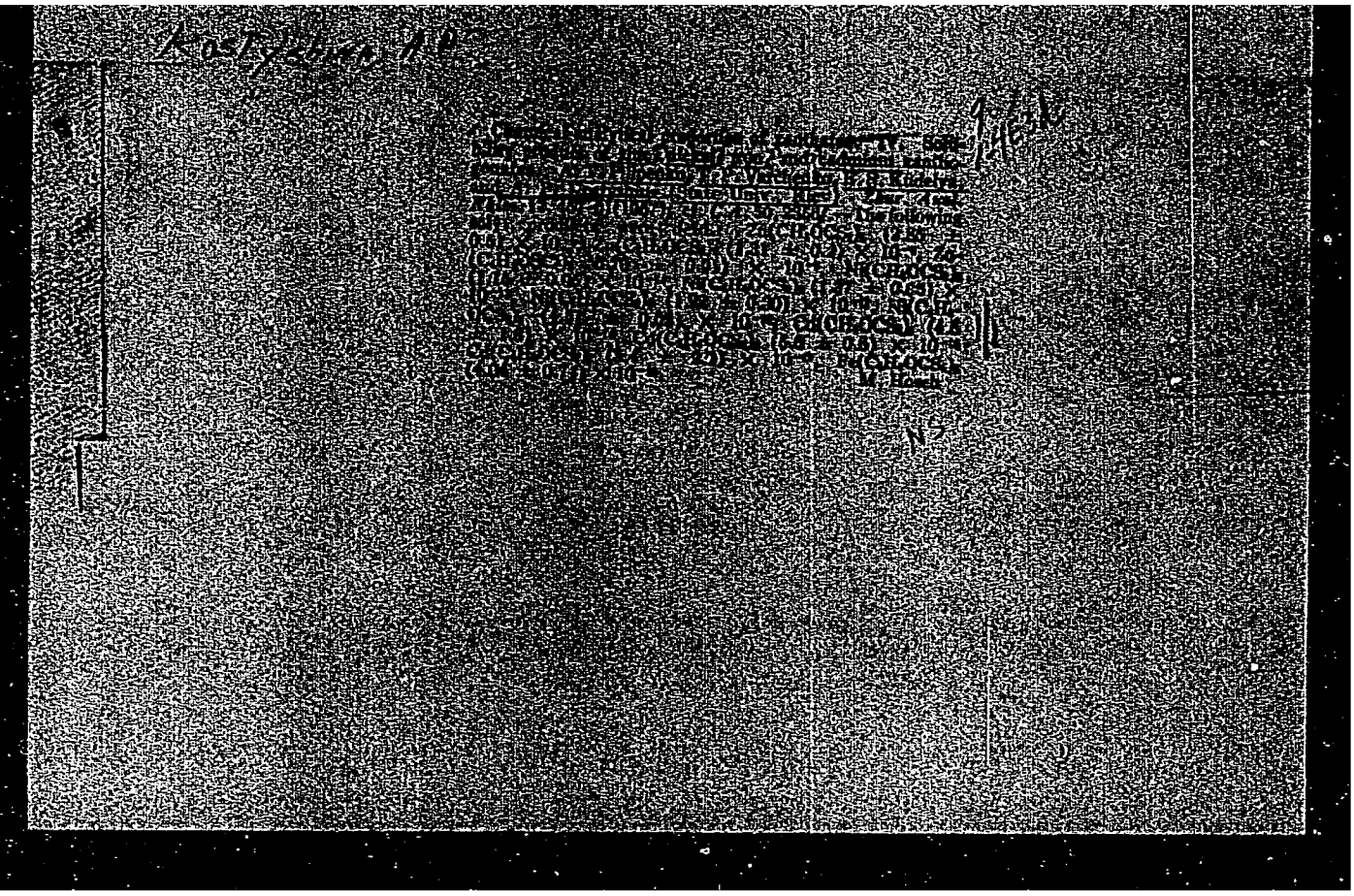

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"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9

KOSTYSHINA, A.P.

Distr: 4E4j/4E2c

1. Determination of the solubility products of the quinolinates of [illegible], indium, and thallium. I. V. Pyatnitskii and A. P. Kostyshina (T. G. Shevchenko State Univ. [illegible]). Zhur. Fiz. Khim. 23, 600-601(1957)(in Russian).—The solubility products of the quinolinates of Ga^{+++}, In^{+++}, and Tl^{+++} are $8.7 \times 10^{-[illegible]}$, $4.0 \times 10^{-[illegible]}$, and $4 \times 10^{-[illegible]}$, resp. John Howe Scott

6
2

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9

Kostyshina, A. P.

AUTHORS: Pyatnitskiy, I. V., Kostyshina, A. P. 78-2-6/43

TITLE: Comparisons Concerning the Stability of the Tartaric-Acid Complexes of Aluminum, Gallium, Indium and Thallium in Ammonia--Hydroxide Solutions (O sravnitel'noy ustoychivosti vinnokislykh kompleksov alyuminiya, galliya, indiya i talliya v ammiachnykh rastvorakh).

PERIODICAL: Zhurnal Neorganicheskoy Khimii, 1958, Vol. 3, Nr 2, pp. 292-295 (USSR).

ABSTRACT: The present paper investigates the tartaric-acid complexes of aluminum, gallium, indium and thallium-/III/ in ammonia hydroxide. The investigations show that ammoniacal tartaric--acid solutions of aluminum, gallium and indium are stable solutions and do not yield any Tyndall effect, i.e. they are no colloidal solutions and diffuse through a cellophane-membrane. The tartaric-acid solutions of the thallium complex are instable and hydrolyze easily. A connection was found to exist between the stability of the tartaric-acid complexes of aluminum, gallium and indium and the pH-value of the hydroxide-precipitation of these metals. The tartaric-acid complex of gallium was found to be the most stable complex. The complexes of

Card 1/ 2

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aluminum and indium are weaker complexes with an almost equal stability. An exception is made by the tartaric-acid complex of thallium which according to the range of precipitation of the hydroxide has a pH-value of 2,4. Its stability would therefore correspond to the gallium-tartaric complex. There are 2 tables and 18 references, 12 of which are Slavic.

SUBMITTED: February 4, 1957

AVAILABLE: Library of Congress

Card 2/2

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9

SOV/78-4-6-21/44

Comparative Stabilities of the Tartaric Acid Complexes of Aluminum, Vanadium, Iron, Titanium, and Copper in Alkaline Medium

distribution coefficient of the aluminum oxyquinolate in chloroform amounts to $K_{distribution} = 2.6.10^{-33}$; $K_{distribution} = 7.5.10^{-23}$ for VO^{2+}; $K_{distribution} = 1.5.10^{-37}$ for Fe^{3+}; and $K_{distribution} = 4.2.10^{-23}$ for Cu^{2+}. The stabilities of the tartaric acid complexes of copper and iron in alkaline media were compared and the results are given in table 2. It was found that the tartaric acid complex of iron is comparatively more stable than that of copper. Furthermore the stabilities of the tartaric acid complexes of aluminum, titanium, vanadium, and iron in ammoniacal solutions were compared. The results are given in table 3. There are 3 tables and 8 references, 7 of which are Soviet.

SUBMITTED: March 18, 1958

Card 2/2

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9

PYATNITSKIY, I.V.; KOSTYSHINA, A.P.

Relative stability of copper, cobalt, and bismuth complexes with trioxyglutaric, tartaric, and malic acids in an alkaline medium. Ukr.khim.zhur. 25 no.1:125-128 '59. (MIRA 12:4)

1. Kiyevskiy gosudarstvennyy universitet im. T.G. Shevchenko.
(Complex compounds)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9

PYATNITSKIY, I.V.; KOSTYSHINA, A.P.

Study of hydroxy acid complexes by the solubility method with the use of extraction. Citric acid complexes with titanium. Izv. vys. ucheb. zav; khim. i khim. tekh. 3 no. 5:794-797 '60. (MIRA 13:12)

1. Kiyevskiy gosudarstvennyy universitet imeni T.G. Shevchenko. Kafedra analiticheskoy khimii.
(Titanium compounds) (Citric acid)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9

PILIPENKO, A.T.; KOSTYSHINA, A.P.

Use of unithiol in analysis. Part 1: Constants of acidic dissociation and the long-period stability of unithiol. Izv.vys.ucheb.zav.;khim.i khim.tekh. 5 no.3:502-503 '62. (MIRA 15:7)

1. Kiyevskiy gosudarstvennyy universitet imeni Shevchenko, kafedra analiticheskoy khimii.
(Propanesulfonic acid) (Chemistry, Analytical)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9

PILIPENKO, A.T.; KOSTYSHINA, A.P.; KUDRITSKAYA, L.N.

Use of thionalide in analysis. Part 1. Determination of the acid dissociation constant of thionalide and solubility products of thallium (I), silver, cadmium, and zinc thionalates. Ukr. khim. zhur. 28 no.1:109-112 '62. (MIRA 16:8)

1. Kiyevskiy gosudarstvennyy universitet im. Shevchenko.

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9

DOROSH, M.M.; KOSTYU, Ya.Ye.; SHKODA-UL'YANOV, V.A. [Shkoda-Ul'ianov, V.O.]

Use of the yield of delayed neutrons from a thick water target in determining the reaction cross section $_8O^{18}(\gamma p)_7N^{17}$ beyond the giant resonance region. Ukr. fiz. zhur. 9 no.9:1040-1041 S '64. (MIRA 17:11)

1. Uzhgorodskiy gosudarstvennyy universitet.

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9

DOROSH, M.M.; KOSTYU, Ya.E.; SHKODA-UL'YANOV, V.A.

Highest possible yields of delayed neutrons produced by certain photonuclear reactions. Atom. energ. 17 no.3: 215-217 S '64. (MIRA 17:9)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9

KOSTYUCHENKO, A.A. [Kastsiuchenka, A.A.]

Age groups and growth of principal commercial cyprinoid fishes in the White Russian section of the Dnieper River. Vestsi AN BSSR.Ser. biial.nav. no.2:102-111 '62. (MIRA 15:8)
(DNIEPER RIVER--CARP)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9

KOSTYUCHENKO, A.A. [Kastsiuchenka, A.A.]

Age composition and growth of pike and fishes of the family Percidae from the Dnieper River (within the White Russian S.S.R.). Vestsi AN BSSR.Ser.biial.nav. no.3:119-123 '62. (MIRA 15:12)
(DNIEPER RIVER--PIKE) (DNIEPER RIVER--PERCH)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9

1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

The influence of soil moisture and boron on the effectiveness of liming on flax. A. D. Kostyuchenko. *Chemization Scientific Tr.* [illegible] When moisture is plentiful lime acts favorably on flax, in a dry year even small quantities of lime exert a depressing effect on flax owing to the intake of large quantities of Ca by the flax. Applications of B mitigate the Ca injurious effects. It prevents the absorption of Ca by the plants. J. S. Joffe

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9

1. KOSTYUCHENKO, A. D., PETROVA, L. I.

2. USSR (600)

4. Lime

7. Doses of lime in grass and flax crop rotation. Agrobiologiia No. 6 1952.

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

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9

KOSTYUCHENKO, A. D., LISTVIN, K. S.,
PETROVA, L. I.

Flax

Application of granulated fertilizers to long-fiber flax. Sov. agron. 10 no. 8, 1952.

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

KOSTYUCHENKO, A.D.

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9

USSR/Cultivated Plants - Technical. Oleaginous. Sugar-Bearing. L-5

Abs Jour : Ref Zhur - Biologiya, No 16, 25 Aug 1957, 69295

Author : Kostyuchenko, A.D.
Inst :
Title : System of Plant Fertilization in Grass Fields and Flax Crop Rotation.

Orig Pub : Tr. Vses. n.-i. in-ta l'na, 1955, No 4, 105-118

Abst : The results of many years of study by the flax institute on the use of fertilizers for flax are stated. The dependence of effectiveness of different fertilizers on the level of agrotechnique, on peculiarities of species of flax, on soil and other conditions in grass fields and flax crop rotation is explained. Data are given on changing different soil properties in districts for flax cultivation as an effect of long years of flax cultivation.

Card 1/1

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9

KOSTYUCHENKO, A. D

USSR/Soil Science. Mineral Fertilizers. I-5

Abs Jour: Referat Zh-Biol., No 6, 25 March, 1957, 22515

Author : Kostyuchenko, A.D.
Inst :
Title : Fertilizers for Long-Fiber Flax.

Orig Pub: Udobrenie i urozhai, 1956, No 3, 23-27.

Abstract: From experimental data obtained by the All-Union Flax Institute and its affiliates (1931-1954), flax needs increased N, P and K in the soil. Of the trace fertilizers, B and Mn are effective, as is Ca on turfy and dark-colored soils. It is recommended that phosphorus and potassium fertilizers be administered before spring plowing or in early spring, and a part of the potassium be put into the nutrient at the beginning of flax budding. Nitrogenous fertilizers should be administered during soil treatment before sowing and into nutrient during the period of "firring".

Card : 1/2 -30-

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9

KOSTYUCHENKO, A.D.; LISTVIN, K.S.; FILIPPOV, Yu.N., red.; ROZHDAYKINA, V.K., tekhn.red.

[The use of fertilizers on leading collective farms of the Kalinin Province] Primenenie udobrenii v peredovykh kolkhozakh Kalininskoi oblasti. [Kalinin] Kalininskoe knizhnoe izd-vo, 1957. 41 p. (MIRA 11:1)
(Kalinin Province--Fertilizers and manures)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9

KOSTYUCHENKO, A.D.; PETROVA, L.I.

Importance of the illuvial horizon in the fertility of sod Podzols [with summary in English]. Pochvovedenie no.2: 42-49 F '57. (MLRA 10:5)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut l'na.
(Podzol)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9

USSR/Soil Science - Mineral Fertilizers. J.

Abs Jour : Ref Zhur - Biol., No 15, 1958, 67960

Author : Kostyuchenko, A.D., Petrova, L.I.

Inst : All-Union Scientific Research Institute of Flax.

Title : Ca^{45} Mobility with Surface Application of Lime.

Orig Pub : Byul. nauchno-tekhn. inform. Vses. n.-i. in-ta l'na, 1957, No 3, 9-10.

Abstract : A pot experiment with clover conducted in the Flax Institute in the city of Torzhok, using radioactive calcium (Ca^{45}) applied in the form of $CaCO_3$, demonstrated that when lime is applied to the top soil layer (0-5 cm.) the Ca^{45} penetrates to a depth of 10-12 cm.; mixing the lime with humus lessened both the depth of penetration of C^{45} and its absorption into the clover plants, while adding P_c to the organic-mineral mixture increased both the former and

Card 1/2

USSR / Cultivated Plants. Plants for Technical Use. Oil Plants. Sugar Plants. M

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24978

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9"

Author : Kostyuchenko, A. D.

Inst : All-Union Scientific-Research Institute of Flax

Title : A Scientific Basis for the System of Fertilizers in the Grassfields of Flax Crop Rotations

Orig Pub : Byul. nauchno-tekhn. inform. Vses. n.-i. in-ta l'na, 1957, No 4, 22-25

Abstract : Experiments with fertilizers were conducted by the All-Union Scientific-Research Institute of Flax. It was established that the maximal doses of lime for light soils in flax crop rotations are 1-1.5 t/ha and for heavy soils -

Card 1/3

USSR / Cultivated Plants. Plants for Technical Use. Oil Plants. Sugar Plants. M

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24978

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9

KOSTYUCHENKO, A. G.

Kostyuchenko, A. G. On a connection between the structure of an $(n-1)$-dimensional surface and its principal curvatures. Uspehi Matem. Nauk (N.S.) 8, no. 5(57), 161-164 (1953). (Russian)

The main results are: If on a hypersurface in E^n one of the principal curvatures has the constant value $\lambda > 0$, then the surface is the envelope of an $(n-2)$-parameter family of spheres with radius λ^{-1}; for $\lambda = 0$ the spheres have to be replaced by planes. There is no surface on which two of the principal curvatures have constant values which are different from each other and from 0 (the case where one of two constant principal curvatures vanishes occurs on cylindrical surfaces). If at every point of the hypersurface ρ of the principal curvatures coincide, then every point belongs to a piece of a ρ-dimensional sphere lying on the surface.

H. Busemann (Copenhagen).

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"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9

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Kontyučenko, A., and Skorohod, A. On a theorem of N. K. Bari. Uspehi Matem. Nauk (N.S.) 8, no. 5(57), 165–166 (1953). (Russian)

N. Bari showed that if $\{\varphi_n\}$ and $\{\psi_n\}$ are orthonormal systems in Hilbert space, and if $\sum|\varphi_n-\psi_n|^2<\infty$, then both systems are complete if one is. The authors reprove this theorem in a neat and straightforward manner. The result is applied to the proof that the orthonormal solutions of certain Sturm-Liouville systems are complete.

B. Gelbaum (Minneapolis, Minn.).

10-28-54 LL

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9

KOSTYUCHENKO, A. G.

USSR/Mathematics - Cauchy problem FD-1167

Card 1/1 Pub. 118-8/30

Author : Kostyuchenko, A. G., and Shilov, G. Ye.

Title : Solution of the Cauchy problem for regular systems of linear equations in partial derivatives

Periodical : Usp. mat. nauk, 9, No 3(61), 141-148, Jul-Sep 1954

Abstract : The definition of a regular system of linear equations in partial derivatives was given by I. M. Gel'fand and G. Ye. Shilov in their article "Fourier transformations of rapidly increasing functions, and the problems of uniqueness of the Cauchy problem," Usp. mat. nauk, 8, No 6(58), 1953. The author in this present work demonstrates the theorem of the existence of the Cauchy problem in the classical sense under ordinary conditions. He considers the system of linear equations in partial derivatives: $u_t = L(pD, t)u$ where $u=u(x, t)$ is the desired m-dimensional vector function with components $u_1(x, t),.., u_m(x, t)$, $x=(x_1,..,x_N)$, $p=1/2\pi i$, $D=d/dx$, and L is a matrix composed of linear differential operators with coefficients depending upon only t. Five references, one French and 4 USSR (e.g. "Evaluations of the solutions of parabolic systems and some of their applications," Mat. sbor., 33(75), No 2, 1953, S. D. Eydel'man).

Institution :

Submitted : January 6, 1954

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9

KOSTYUCHENKO, A.G.

USSR/ Mathematics - Cauchy's theorem

Card 1/2 : Pub. 22 - 4/44

Authors : Kostyuchenko, A. G.

Title : ~~Cauchy's theorem (problem)~~ for a linear system of equations with partial derivatives and differential operators of Sturm-Liouville's type

Periodical : Dok. AN SSSR 98/1, 17-20, Sep 1, 1954

Abstract : An answer is sought to the question concerning the singularity and, for some class of functions, even the existence of a solution by the Cauchy theorem expressed by the system of equations

$$\frac{\partial u}{\partial t} = P(L,t)u$$

with the initial conditions:

$$u(x,0) = u_0(x); \quad \left.\frac{\partial u}{\partial x}\right|_{x = 0} = 0,$$

Institution : Kiev State University im. T. G. Shevchenko

Presented by: Academician A. N. Kolmogorov, May 31, 1954

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9

Periodical : Dok. AN SSSR 98/1, 17-20, Sep 1, 1954

Card 2/2 : Pub. 22 - 4/44

Abstract : where u(x,t) is a vector-function P(L,t) is a matrix the elements of which are polynomials of Sturm-Liouville's operators. Five references (1946-1954).

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9

KOSTYUCHENKO, A.G., student IV kursa.

A Liouville theorem. Stud.nauk.pratsi no.16:13-19 '55. (MLRA 10:2)
(Geometry, Differential)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9

KOSTYUCHENKO, A.G.

USSR/ Mathematics

Card 1/1 Pub. 22 - 3/46

Authors : Kostyuchenko, A. G.

Title : On the singularity of the solution of the Cauchy problem and the mixed problem of certain systems of linear equations in partial derivatives

Periodical : Dok. AN SSSR 103/1, 13-16, Jul 1, 1955

Abstract : A justification of the applicability of Gelfand and Shilov's method to proving singularity of the solution of Cauchy's problem and the mixed problem of certain systems of linear equations with variable coefficients is shown. Gelfand and Shilov developed a new method for proving the singularity of the solution of Cauchy's problem dealing with some systems of linear equations of the following type:

$$\frac{\partial u}{\partial t} = P\left(\frac{\partial}{\partial x}\right)u, \quad u(x,0) = u_0(x).$$

Six references: 1 Fr. and 5 USSR (1944-1955).

Institution : Moscow State University imeni M. V. Lomonosov

Presented by: Academician A. N. Kolmogorov, March 8, 195

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9

KOSTYUCHENKO, A.G.

Gel'fand, I. M., and Kostyuchenko, A. G. Expansion in eigenfunctions of differential and other operators. Dokl. Akad. Nauk SSSR (N.S.) 103 (1955), 349-352. (Russian)

Notations: Φ=espace de Fréchet de fonctions indéfiniment différentiables sur R^n; Φ'=dual de Φ; on suppose $\Phi \subset \Phi'$. On donne sur Φ une forme sesquilinéaire (φ, ψ) définie positive continue; soit $\bar{\Phi}$ le complété de Φ pour cette structure; on a $\Phi \subset \bar{\Phi} \subset \Phi'$. Soit A opérateur linéaire continu de Φ dans Φ avec $(A\varphi, \psi) = (\varphi, A\psi)$ pour tout $\varphi, \psi \in \Phi$. On suppose qu'il existe $\bar{A}$, hypermaximal dans $\bar{\Phi}$, d'ensemble de définition contenant Φ, avec $\bar{A}\varphi = A\varphi$ pour tout $\varphi \in \Phi$. Soit A' le transposé de A dans Φ'. Un élément T de Φ' est dit "fonction propre généralisée" si $A'T = \lambda T$, $\lambda \in C$. Théorème: Sous les hypothèses ci dessus, il existe un système complet de fonctions propres généralisées.

1 - F/W

Moscow State Univ im M.V. Lomonosov

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Les A. en déduisent un résultat de "diagonalisation" de A (cf. des résultats plus précis dans les travaux de Mautner et Gårding, cf. notamment Gårding, Applications of the theory of direct integrals of Hilbert spaces to some integral and differential operators, Univ. of Maryland, 1954 [MR 17, 159] où l'on trouvera d'autres indications bibliographiques). Exemples: A est un opérateur différentiel sur R ou sur R^n, elliptique ou non, certains espaces φ sont construits à partir des propriétés de croissance des coefficients de A. Généralisation à $A+\lambda B$, $B>0$.

J. L. Lions (Nancy)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9

KOSTYUCHENKO, A. G. Cand Phys-Math Sci -- (diss) "On eigenfunctions of self-adjoint operators." Mos, 1957. 7 pp 20 cm. (Mos. State Univ im Lomonosov), 125 copies. (KL, 24-57, 115)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9

KOSTYUCHENKO, A. G.

3

O Povedenii Sobstvennykh Funktsii Samosopriazhennykh Operatorov. A. G. Kostyuchenko. AN SSSR Dokl., May 11, 1957, pp. 249-251. In Russian. Study of the behavior of eigenfunctions of selfadjoint operators.

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Card 1/3 operator $R_{\lambda_0} f = \int_{-\infty} K(x,y)f(y)dy$ with the kernel $K(x,y)$.

APPROVED FOR RELEASE: 06/14/2000

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9

20-2-4/60

On the Behavior of the Eigenfunctions of Selfconjugating Operators

This kernel is assumed to satisfy the condition

$\int_{-\infty}^{\infty} |K^2(x,y)|\, dy < C$, for nearly all x, where the constant C does not depend on x. In this case nearly all (with respect to $\sigma_\alpha(\lambda)$) eigenfunctions $dE_\lambda g^{(\alpha)}/d\sigma_\alpha(\lambda)$ are restricted with respect to x. Three corollaries are given to this theorem. If the resolvent R_{λ_0} in the point λ_0 is an integral operator with a Karleman-kernel (?), then also $E_\lambda f$ is an integral operator with the kernel $\vartheta(x,y,\lambda)$.

Theorem 2: If the operator $-y''+ q(x)y= \lambda y$ is a resolvent with a certain property given here, then the spectral kernel $\varphi(x,y,\lambda)$ is restricted for nearly all λ with respect to $\sigma(\lambda)$.

In conclusion, the Schroedinger equation in the entire space R_3 is given as an example and investigated:

$-\Delta u + q(x)\, u = \lambda u,\ x = (x_1, x_2, x_3),\ q(x) > c_0 > -\infty.$

There are 6 references, 5 of which are Soviet.

Card 2/3

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-

20-2-4/60

On the Behavior of the Eigenfunctions of Selfconjugating Operators

ASSOCIATION: Moscow State University imeni M. V. Lomonosov (Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova)

PRESENTED: December 10, 1956, by S. L. Sobolev, Academician

SUBMITTED: December 7, 1956

AVAILABLE: Library of Congress

Card 3/3

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9

KOSTYUCHENKO, A. G.

20-1-8/54

AUTHOR: Kostyuchenko, A.G.

TITLE: On the Spectral Properties of Self-Adjunct Elliptical Operators. (O spektral'nykh svoystvakh samosopryazhennykh ellipticheskikh operatorov)

PERIODICAL: Doklady Akademii Nauk SSSR, 1957, Vol. 115, Nr 1, pp.34-37 (USSR)

ABSTRACT: In the present paper the inequation $\int_{-\infty}^{\infty} K^2(x,y,\lambda_0)\,dy$ C is obtained, (where the constant C is independent of x) for a fairly large class of elliptical operators. The author further establishes a statement on the index of the deficiency of such operators. The author investigates the following operator in the space of the N-dimensional vector functions

$$L = \sum_{k_1+\dots+k_n=2m} A^{k_1\dots k_n}(x) \frac{\partial^{2m}}{\partial x_1^{k_1}\dots\partial x_n^{k_n}} + T,$$ where $x = (x_1,\dots,x_n)$, $-\infty < x_1 < \infty$. $A^{k_1\dots k_n}(x)$ signifies the matrix $\|a_{ij}^{k_1\dots\dots k_n}(x)\|$, $i,j = 1,2,\dots,N$. T signifies here a linear differential operator with the order $< 2m$. First several conditions are given:

a) the coefficients $a_{ij}^{k_1\dots\dots k_n}(x)$ have 2m continuous derivatives limited in the entire space R_n. The coefficients in the case of the lowest derivatives have derivatives of first order and they

Card 1/2

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"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9

On the Spectral Properties of Self-Adjunct Elliptical Operators. 20-1-8/54

are limited in the entire R_n (just as their derivatives).

b) It is assumed that the matrices $A^{k_1 \cdots k_n}(x)$ are symmetrical. The operator L is formally symmetric in the sense of differential expressions.

c) The third condition concerns the characteristic roots. D_L signifies here the definition domain of the operator L. Then, among others, the following applies:

Theorem 1: When the operator satisfies the conditions (a), (b), (c) and is half restricted to D_L, such a real number λ_o exists, so that for the kernel of the resolvent $K(x,y,\lambda_o)$ the initially described inequation is satisfied.

Theorem 2: When the operator L satisfies the conditions (a), (b), (c) and is half restricted to D_L it has the deficiency index (0,0).

Thereafter 2 further theorems are given and proved. There are 7 Slavic references, no figures.

ASSOCIATION: Moscow State University imeni M.V.Lomonosov (Moskovskiy gosudarstvennyy universitet imeni M.V.Lomonosova)

PRESENTED: January 19, 1957 by A.N.Kolmogorov, Academician

SUBMITTED: January 19, 1957

AVAILABLE: Library of Congress

Card 2/2

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9

HORMANDER, Lars; FRANK, L.S.[translator]; BOROK, V.M., red.; KOSTYUCHENKO, A.G., red.

[Theory of general partial differential operators] K teorii obshchikh differentsial'nykh operatorov v chastnykh proizvodnykh. Pod red. V.M.Borok i A.G.Kostiuchenko. Moskva, Izd-vo inostr. lit-ry, 1959. 131 p. Translated from the English. (MIRA 15:5)
(Calculus, Operational)

APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9"

"APPROVED FOR RELEASE: 06/14/2000 CIA-RDP86-00513R000825310012-9

A.G. Kostyuchenko

16(1)

AUTHORS: Skoryy, I.A., University Lecturer, and Kopytov, V.D., Scientific Assistant SOV/55-58-2-33/35

TITLE: Lomonosov - Lectures 1957 at the Mechanical-Mathematical Faculty of Moscow State University (Lomonosovskiye chteniya 1957 goda na mekhaniko-matematicheskom fakul'tete MGU)

PERIODICAL: Vestnik Moskovskogo Universiteta, Seriya matematiki, mekhaniki, astronomii, fiziki, khimii, 1958 ,Nr 2, pp 241-246 (USSR)

ABSTRACT: The Lomonosov lectures 1957 took place from October 17 - October 31, 1957 and were dedicated the 40-th anniversary of the October revolution.

16. A.D. Gorbunov, Lecturer and B.M. Budak, Lecturer : Difference Methods for the Solution of Hyperbolic Equations.
17. N.S. Bakhvalov : Number of Calculation Operations for the Solution of Elliptic Equations.
18. V.I. Lebedev, Aspirant : Difference Method for the Solution of the Sobolev-System.
19. Professor Ye.B. Dynkin : Markov Processes and Semigroups.
20. A.G. Kostyuchenko, Candidate of Physical-Mathematical Sciences : Decomposition of Differential Operators With Respect to Generalised Eigenfunctions.
21. F.A. Berezin, Candidate of Physical-Mathematical Sciences: Foundations of the Theory of Spherical Harmonics on Manifolds.
22. V.M. Borok, Aspirant : General Properties of Partial Evolution Systems.
23. V.A. Uspenskiy, Candidate of Physical-Mathematical Sciences : On Constructive Mathematical Analysis.
24. P.L. Ul'yanov, Lecturer : Reversal of Terms in Trigonometric Series.
25. I.G. Petrovskiy, Academician and Ye.M. Landis, Senior Scientific Assistant : On the Number of Boundary Cycles of a Differential Equation of First Order With a Rational Right Side.

The contents of all the lectures have already been published.

Card 5/5

(12)

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S/055/59/000/05/014/020

AUTHORS: Bass, G. J., Kostyuchenko, A. G.

TITLE: On the Principle of the Limit Amplitude

PERIODICAL: Vestnik Moskovskogo universiteta. Seriya matematiki, mekhaniki, astronomii, fiziki, khimmi, 1959, No. 5, pp. 153-164

TEXT: Let the Cauchy Problem

(2) $$\frac{\partial^2 V}{\partial t^2} + L\left(\frac{1}{i}\frac{\partial}{\partial x}\right)V = f(x)\, e^{i\omega t}$$

(3) $$V(x, 0) = \frac{\partial V(x,0)}{\partial t} = 0,$$

be considered, where $x = (x_1, \ldots, x_n)$, $L(\frac{1}{i}\frac{\partial}{\partial x})$ a positive operator ($L(s) \geq 0$ for real s), $f(x)$ a finite and sufficiently smooth function; let $L(s)$ be a homogeneous polynomial of degree 2m.

Theorem 1: Let $n > 2m$. Then in every finite domain there exists uniformly with respect to x the boundary value

$$\lim_{t\to\infty} V(x,t)e^{-i\omega t} = u(x),$$

Card 1/2

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On the Principle of the Limit Amplitude

where u(x) is the solution of the equation

(1) $Lu - w^2u = -f(x)$.

(Principle of the limit amplitude).
Another possibility of determining the solution of (1) shows the principle of the limit absorption (see (Ref.1,3)). For this purpose the authors consider the equation $Lu - \lambda^2 u = -f(x)$, where $\lambda^2 = w^2 + i\varepsilon$, $\operatorname{Im} w = 0$, and prove that $\lim_{\varepsilon \to 0} R_\lambda$ exists, where R_λ is the unique resolvent.
J. G. Petrovskiy is mentioned in the paper.
There are 7 Soviet references.

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Card 2/2

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KOSTYUCHENKO, A.G.; MITYAGIN, B.S.

Positively defined functionals on kernel spaces. Trudy Mosk.mat. ob-va 9:283-316 '60. (MIRA 13:9)
(Functional analysis)

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~~16(1)~~ 16 4600 S/020/60/131/01/002/060

AUTHORS: Kostyuchenko, A.G., Mityagin, B.S.

TITLE: Positively Defined Functionals on Nuclear Spaces 16

PERIODICAL: Doklady Akademii nauk SSSR, 1960, Vol 131, Nr 1 pp 13-16 (USSR)

ABSTRACT: Let a continuous Hermitean form (φ,ψ) be given in the linear topological nuclear space Φ. Let Φ be completed to a complete Hilbert space H under consideration of this scalar product. Then it is (see [Ref 6]) $\Phi \subset H \subset \Phi'$, where Φ' is the conjugate space of Φ. Let the system $A_1, A_2, \ldots, A_n$ of symmetric operators in Φ which possess self-adjoint commutating extensions in H be considered.

Theorem 1 : If the system $\{A_i\}$ of symmetric operators possesses self-adjoint mutually commutating extensions in H, then this system possesses a complete system of general eigenfunctionals $\chi_{\lambda_1,\ldots,\lambda_n}$ over Φ, and it holds the representation

Card 1/4

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Positively Defined Functionals on Nuclear Spaces S/020/60/131/01/002/060

$$(1)\quad (\varphi,\psi) = \sum_{\alpha} \int_{-\infty}^{\infty} \cdots\cdots \int (\overline{\chi_{\lambda_1 \ldots \lambda_n}, \varphi})\, (\chi_{\lambda_1 \ldots \lambda_n}, \psi)\, d\sigma_{\alpha}(\lambda_1, \ldots, \lambda_n),$$

where $\sigma_{\alpha}(\lambda_1, \ldots, \lambda_n)$ is a system of finite measures in the n-dimensional space. If the system of commutating operators in its totality possesses a simple spectrum, then it is

$$(1^a)\quad (\varphi,\psi) = \int_{-\infty}^{\infty} \cdots\cdots \int (\overline{\chi_{\lambda_1 \ldots \lambda_n}, \varphi})\, (\chi_{\lambda_1 \ldots \lambda_n}, \psi)\, d\sigma(\lambda_1, \ldots, \lambda_n)$$

Definition : A complete linear topological space ϕ is called kernel algebra (ring) with involution, if ϕ is a kernel space and if a commutative multiplication x o y and an involution $x \to x^*$, which are continuous in the topology of ϕ, are defined on ϕ.

Definition: A continuous operator A on a kernel algebra with involution is called character operator, if $Ax \circ y^* = x \circ (Ay)^*$ holds for arbitrary $x, y \in \phi$.

Card 2/ 4

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Positively Defined Functionals on Nuclear Spaces S/020/60/131/01/002/C60

Definition : A continuous functional T is positive definite on a kernel algebra with involution, if $T(x \circ x^*) \geqslant 0$ for all $x \in \phi$.

Properties : 1. $A(x \circ y) = A x \circ y = x \circ Ay$ 2. the character operator is real, i.e. $(Ax)^* = Ax^*$. 3. The ring $\mathfrak{A}$ of the character operators is commutative. 4. The subring ϕ_* of all Hermitean elements (i.e. with $x = x^*$) is dense in $\mathfrak{A}$. 5. Every positive definite functional is real, i.e. $T(x^*) = \overline{T(x)}$.
Under certain assumptions there holds the representation

$$(2) \qquad T(x) = \int_{-\infty}^{\infty} (\overline{\chi_\lambda, x}) d\sigma(\lambda)$$

for positive definite functionals, where χ_λ are multiplicative functionals and $\sigma(\lambda)$ is uniquely determined under certain further assumptions. The authors consider a class of kernel algebras with involution in which the above mentioned commutativity condition, which is difficult to verify, is always satisfied.

Card 3/4

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Positively Defined Functionals on Nuclear Spaces S/020/60/131/01/002/060

As an example the authors investigate in detail the representation of positive definite functionals in S_{α}^{B} (see [Ref 8]). Altogether there are given 7 theorems. I.M.Gel'fand, Sya Do-shin, N.Ya. Vilenkin, Ye,B. VUl, S.N. Bernshteyn, and M.G. Kreyn are mentioned in the paper.
There are 10 references, 8 of which are Soviet, and 2 French.

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Card 4/4

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AUTHORS: Kostyuchenko, A. G. Mityagin, B. S.

TITLE: Multidimensional Problem of Moments

PERIODICAL: Doklady Akademii nauk SSSR, 1960, Vol. 131, No. 6, pp. 1249-1252

TEXT: A continuous linear functional T on the algebra Φ with the involution $\varphi \to \varphi^*$ is called positive-definite, if $T(\varphi\varphi^*) \geqq 0$ for all $\varphi \in \Phi$.

The authors use the general method represented by them in (Ref.1,2) (integral representation of positive-definite functionals on kernel spaces) in order to formulate in ten theorems several properties of the positive-definite functionals on sequence spaces.

Theorem 5: Let Φ be an algebra of k-fold sequences $\{\varphi_n, n = (n_1, \dots, n_k), n_i = 0, \pm 1, \dots\}$ with the multiplication $(\varphi\psi)_n = \sum_{i+j=n} \varphi_i \psi_j$ the involution $(\varphi^*)_n = \bar{\varphi}_{-n}$ and any kernel topology in which the multiplication is continuous; let Φ contain all finite sequences. Then every positive-definite functional T on Φ has the representation

Card 1/3

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