KUKUSHKIN, L.S.

Theory of nonradiative transitions in impurity molecular crystals. Opt. i spektr. 15 no.3:371-374 S '63. (MIRA 16:10)

KOVALEV, V.P.; DOBROKHOTOVA, V.K.; NABOYKIN, Yu.V.; KUKUSHKIN, L.S.

Luminescence of molecular crystals containing impurities of different solubility in the solid phase. Izv.AN SSSR.Ser.fiz. 27 no.4:524-526 Ap '63. (MIRA 16:4)
(Luminescence) (Crystal lattices)

KUKUSHKIN, L.S.

Temperature dependence of optical and nonradiative transitions in semiconductors. Zhur. eksp. i teor. fiz. 44 no.2: 703-709 F '63. (MIRA 16:7)

1. Fiziko-tekhnicheskiy institut nizkikh temperatur AN UkrSSR.

L 24913-65 EWT(1) IJP(c)

ACCESSION NR: AP5003413 S/0181/65/007/001/0054/0061

AUTHOR: Kukushkin, L. S. 22 24 B

TITLE: The inverse problems for certain processes connected with multiple phonon transitions

SOURCE: Fizika tverdogo tela, v. 7, no. 1, 1965, 54-61

TOPIC TAGS: multiple phonon transition, absorption band, emission band, phonon spectrum, Mossbauer effect, neutron scattering

ABSTRACT: A unified mathematical method is used to consider the inverse problems for the absorption or emission of light by local centers and for the absorption of gamma quanta or slow neutrons by crystal nuclei. It is pointed out that most experimental studies of the absorption and emission bands due to local centers yield only the average energy of the phonons that participate most actively with the optical transitions, whereas the characteristics of the

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center and of the lattice, connected with the detailed shape of the band, such as the shift of the equilibrium positions of the lattice during the transition or the density of the phonon spectrum, cannot be obtained in principle with the aid of first moments. A method of determining these characteristics from the shapes of the optical bands measured at low temperatures is therefore proposed, and the possibility of finding the density of the phonon spectrum from the shape of the absorption bands of slow neutrons or gamma quanta by crystal nuclei, and also from the differential cross section of incoherent scattering of slow neutrons, is discussed briefly. This makes it possible to construct the characteristics of the local centers and lattice from the shape of the absorption band and from the light radiated by these centers, and also to find the density of the phonon spectrum from the shape of the Mossbauer wings and from the differential cross section of the incoherent scattering of slow neutrons. The method is based on an integral equation that describes accurately the multiple-phonon transitions of all orders.

L 24913-65

ACCESSION NR: AP5003413

This integral equation was derived by the author earlier (FTT v. 5, 2170, 1963). Methods of finding this equation at low temperatures are presented, and it is shown that the resultant solutions are quite insensitive to possible experimental errors. Orig. art. has: 32 formulas.

ASSOCIATION: Fiziko-tekhnicheskiy institut nizkikh temperatur AN UkrSSR, Khar'kov (Physicotechnical Institute of Low Temperatures, AN UkrSSR)

SUBMITTED: 17Jun64 ENCL: 00 SUB CODE: SS

NR REF SOV: 006 OTHER: 004

Card 3/3

L 01509-66 IJP(c)

ACCESSION NR: AP5012637 UR/0051/65/018/005/0925/0927
535.37.001.11

AUTHOR: Kukushkin, L. S. 44,55

TITLE: On the concentration dependence of nonradiative transitions in molecular impurity systems 21 B

SOURCE: Optika i spektroskopiya, v. 18, no. 5, 1965, 925-927

TOPIC TAGS: nonradiative transition, optic transition, molecular spectrum 21,44,55

ABSTRACT: The author reports a qualitative investigation of one of the possible generalizations of the theory of resonance inductive transfer to cover a case when the values of the difference between the energies corresponding to the initial and final states (ΔE_{kl}) is comparable with the energy of interaction between molecules (V_{kl}). Since the expressions are too unwieldy for physical interpretation, the author investigates, for the purpose of obtaining intuitively clear results, a model of the system consisting of two impurity molecules (k and l) isolated from the rest of the impurity molecules and situated among the molecules of the base material. The wave functions of the system are written out by making use of an adiabatic approximation with the optical electrons and the intramolecular vibrations of the molecules as the fast system, and intermolecular vibrations (vibrational and rotational motions of all the molecules as a whole) as the slow subsystem. With

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L 01509-66

ACCESSION NR: AP5012637

such a picture, the cause of the transition is the nonadiabaticity operator. An expression is then obtained for the probability per unit time of the nonradiative transition from the first electron state to the second. Several cases when the results become comparable with the thoery of resonance inductive transfer are discussed. It is pointed out in the conclusion that the concentration dependence observed for high impurity concentrations cannot be fully explained theoretically. Orig. art. has: 7 formulas.

ASSOCIATION: none

SUBMITTED: 21Jul64 ENCL: 00 SUB CODE: OP

NR REF SOV: 004 OTHER: 002

Card 2/2 DP

KUKUSHKIN, S.I.

A new type of school. Uch.zap.Ivan.gos.ped.inst. 34:129-136 '64. (MIRA 18:4)

9(2) SOV/91-59-10-18/29

AUTHOR: Kukushkin M.A., Senior Electrical Fitter

TITLE: Device for Checking of Relay Protective System by Lowered Tension

PERIODICAL: Energetik, 1959, Nr. 10, pp 27-28, (USSR)

ABSTRACT: The author has constructed a device for checking current intensity of the trip coil, intermediate signal-relay and time-relay, by applying lowered tension (Fig. 1). The device is mounted in a 25 x 20 x 10 cm case. It operates on the following principle: The fuses of the system to be checked are removed and, instead, special pegs (B) are inserted (Figs. 1 and 2). The cutout P is switched on; by closing the contacts 1-3 and 2-4, it supplies tension to potential divider P. By moving the potential divider slide, the necessary tension indicated by voltmeter V (65% of nominal tension for the trip coil, and 85% for the relay) is established. The work of the oil trip coil is checked by switching out the cutout by means of control key. The work of the layout as a whole is checked

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Device for Checking of Relay Protective System by Lowered Tension

by closing the relay contacts by hand. Over a period of three years, the use of this design has proved its simplicity of operation and reliability; it does not require highly qualified personnel to operate it, and it speeds up the work. There are 2 diagrams.

KUKUSHKIN, M.F., inzh.

Using furnace slags in overhauling roads. Avt.dor. 22 no.2:19 F '59. (MIRA 12:2)
(Roads--Maintenance and repair)

KUKUSHKIN, M.S.

GRITSEVSKIY, M.Ye., inzhener; SMOLYANSKIY, Ya.B., kandidat ekonomicheskikh nauk; KUKUSHKIN, M.S., kandidat ekonomicheskikh nauk (Leningrad).

A valuable book on transportation economics ("Economics of transportation." A.E.Gibshman and others. Reviewed by M.E.Gritsevskii, IA.B.Smolianskii, M.S.Kukushkin). Zhel.dor.transp.38 no.12:86-91 D '56. (MLRA 10:2)

(Transportation) (Gibshman, A.E.)

KUKUSHKIN, M.S., kand. ekonom. nauk, dotsent

Transportation as a branch of material production and several problems in developing it. Uch. zap. LIIZHT no.3:62-82 '62.
(MIRA 17:3)

KUKUSHKIN, N. A.

Hydrodynamics

Dissertation: "Problem of Hydrodynamic Analysis of an Impeller." Cand Tech Sci, Gor'kiy Polytechnic Inst, Gor'kiy, 1953. (Referativnyy Zhurnal — Mekhanika, Moscow, Mar 54)

SO: SUM 213, 20 Sep 1954

KUKUSHKIN, N. D. I MURAV'EV, N. F.

5548. Kukushkin, N. D. i Murav'ev, N. F. Rikhtovka khodovykh vintov i remont shpindelev metallorezhushchikh stankov. (Metod tokaryanovafora LVZ im. Stalina N. D. Kukushkina). L., 1954. Obl.,4s. s chert. 20 sm. (Vsesoyuz. o-vo po rasprostraneniyu polit. i nauch. Znaniy. Leningr. dom nauch.-tekhn. propagandy. Listok novatora. No 21(260)). 3800 ekz. 10k.----Avt. ukazany v kontse teksta. ----(54-14780zh) 621-91-77 st

So: Knizhnaya Letopis', Vol. 1, 1955

NEPRIMEROV, N.N.; SHARAGIN, A.G.; YASHIN, Ye.I.; PLATONOV, Yu.I.; KUKUSHKIN, N.M.

Study of active gas wells using complex remote control instruments of the Kazan State University. Izv. vys. ucheb. zav.; neft' i gaz 7 no.10:39-44 '64. (MIRA 18:2)

1. Kazanskiy gosudarstvennyy universitet im. V.I. Ul'yanova-Lenina.

NEPRIMEROV, N.N.; SHARAGIN, A.G.; YASHIN, Ye.I.; PLATONOV, Yu.K.; KUKUSHKIN, N.M.

Investigating acting gas wells with combined KGU remote-control devices. Izv. vys. ucheb. zav.; neft' i gaz 7 no.7:101-106 '64.

KUKUSHKIN, P.

Thirty years on the job. Gor.khoz.Mosk. 31 no.10:17 O '57.
(MIRA 10:10)

1. Upravlyayushchiy domami domoupravleniya No.9 Baumanskogo rayona. Deputat rayonnogo Soveta.
(Moscow--Apartment houses)

KUKUSHKIN, S.

One of the best on the Yenisey River. Rech. transp. 20 no.10:13 O '61. (MIRA 14:9)
(Yenisey River--Inland water transportation--Employees)

KUKUSHKIN, S., prof.

Studies on trade-union congresses. Sov. profsoiuzy 18 no.15: 47 Ag '62. (MIRA 15:7)
(Bibliography--Trade unions--Congresses)

[redacted], S.M.

EPP
.R92931

O RABOTE I.V. STALINA "O PRAVOM UKLONE V VKP (B)". MOSKVA, IZD-VO ZNANIYE 1952. 31 P. (VSESOYUZNOYE OBSHCHESTVO PO RASPROSTRANENIYU POLITICHESKIKH I NAUCHNYKH ZNANIY. 1952, SERIYA I, NO. 58)

YEFIMENKO, G.G., inzh.; VOYTANIK, S.T., inzh.; YEFIMOV, S.P., inzh.; MACHKOVSKIY, A.I., inzh.; RUDKOV, A.K., inzh.; RUDKOVSKIY, G.I., inzh.; Prinimali uchastiye: KOVALEV, D.A.; GOTOVTSEV, A.A.; VASIL'YEV, G.S.; ZEMLYANOY, A.A.; KUKUSHKIN, S.N.; MATYNA, M.G.; LOVCHANOVSKIY, V.A.; KRAMNIK, T.A.; NECHESOVA, N.I.; MARTYNENKO, V.A.; KURAKSIN, D.I.; LETYAGIN, N.L.

Intensifying the sintering process by the use of a special charge wetting device. Stal' 23 no.12:1061-1064 D '63. (MIRA 17:2)

1. Dnepropetrovskiy metallurgicheskiy institut, zavod im. Dzerzhinskogo i Yuzhnyy gornoobogatitel'nyy kombinat. 2. Dnepropetrovskiy metallurgicheskiy institut (for Kovalev, Gotovtsev, Vasil'yev, Zemlyanoy, Kukushkin). 3. Zavod im. Dzerzhinskogo (for Matyna, Lovchanskiy, Kramnik, Nechesova). 4. Yuzhnyy gornoobogatitel'nyy kombinat (for Martynenko, Kuraksin, Letyagin).

KUKUSHKIN, V., red.; SHAGARINA, A., tekhn.red.

[Columbuses of outer space] Kolumby kosmosa. Moskva, Izd-vo "Pravda," 1961. 78 p. (Biblioteka "Komsomol'skoi pravdy," no.4). (MIRA 14:4)
(Astronautics)

KUKUSHKIN, V., red.; SUROVTSEVA, S., tekhn. red.

[A man-made "sun."]Zemnoe solntse. Moskva, Izd-vo "Pravda," 1962. 62 p. (Biblioteka "Komsomol'skoi pravdy," no.9)
(MIRA 15:10)

(Atomic energy)

KUKUSHKIN, V., red.; SHIROKOVA, S., tekhn. red.

[Searching for X] V poiskakh iks'a Moskva, Izd-vo "Pravda," 1962. 78 p. (Biblioteka "Komsomol'skoi pravdy," no.6) (MIRA 15:7)
(Research)

OREKHOV, P.A., inzh.; KUKUSHKIN, V.I., tekhnik

Welded sternpost. Svar. proizv. no.10:35-36 O '63. (MIRA 16:11)

OREKHOV, P.A., inzh.; KUKUSHKIN, V.I., inzh.

Checking the compactness of welded joints with helium leak detectors. Svar. proizv. no.9:32-33 S '63. (MIRA 16:10)

BELOV, V.I., inzhener; KUKUSHKIN, V.I., inzhener.

Production of hollow bricks at the Tallinn Brick Factory. Stroi.prom. vol. 31 no.9:43-45 S '53. (MLRA 6:9)
(Hollow tiles)

KUKUSHKIN, V.I.

Amateur performances of petroleum workers. Neftianik 1 no.8: 34-35 Ag '56. (MLRA 9:11)

(Amateur theatricals)

SKRIPOV, V.P.; KUKUSHKIN, V.I. (Sverdlovsk)

Apparatus for observing the limit superheating of liquids.
Zhur.fiz.khim. 35 no.12:2811-2813 D '61. (MIRA 14:12)

1. Ural'skiy politekhnicheskiy institut imeni S.M. Kirova.
(Superheaters) (Liquids)

L 19917-63 EWP(k)/EWP(q)/EWT(m)/EWP(B)/BDS--AFFTC/ASD--Pf-4--JD/HM

ACCESSION NR: AP3006484 S/0135/63/000/009/0032/0033

AUTHORS: Orekhov, P. A. (Engineer); Kukushkin, V. I. (Engineer)

TITLE: Checking welded seams for leakage with a helium detector

SOURCE: Svarochnoye proizvodstvo, no. 9, 1963, 32-33

TOPIC TAGS: welded seam, helium detector, leakage

ABSTRACT: The authors designed and constructed an apparatus for checking fluid-tightness of seams in welded objects. The apparatus consists of helium detector (1) (see enclosures), vacuum pumps (2), collector (5), valves (11 and 15), thermocouples (14 and 16), helium tank (17), and nitrogen tank (19). The object to be tested is placed in a chamber that may be either evacuated or filled with helium under pressure. The object, too, may be either evacuated or filled with helium, so that either inflow or outflow through a leaking seam can be detected. The detector should be calibrated so that it does not register atmosphere helium. The entire apparatus must be checked for air-tightness and blown through with nitrogen. Even a minute leak will allow helium to flow into the evacuated zone and to be registered by the detector. The latter responds with a sound signal. The

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L 19917-63
ACCESSION NR: AP3006484

apparatus may test 3 objects at once, may be easily transported, and requires the services of a single operator. Orig. art. has: 1 figure.

ASSOCIATION: none

SUBMITTED: none DATE ACQ: 30Sep63 ENCL: 02

SUB CODE: ML NO REF SOV: 000 OTHER: 000

Card 2/4

KUKUSHKIN, Vasiliy Nikolayevich; VOYEVODIN, V.P., red.; TIKHONOVA, I.M., tekhn.red.

[Sestroretsk dynasty. The past and the present of the Sestroretsk Metal Cutting Tool Plant] Sestroretskaia dinastiia. Ocherki o proshlom i nastoiashchem Sestroretskogo instrumental'nogo zavoda imeni S.P.Voskova. Leningrad, Lenizdat, 1959. 149 p. (MIRA 12:9)
(Sestroretsk--Cutting tools)

KUKUSHKIN, V.S.; SPASYUK, P.I.; KOVAL'CHUK, U.Ya.

Preparing for the 22d Congress of the CPSU. Put' i put.khoz. 5 no.7:2 Jl '61. (MIRA 14:8)

1. Zamestitel' nachal'nika distantsii puti, stantsiya Kamyshlov, Sverdlovskoy dorogi (for Kukushkin). 2. Nachal'nik Bogotol'skoy distantsii puti, Vostochno-Sibirskoy dorogi (for Spasyuk). 3. Nachal'nik shchebenochnogo zavoda, stantsiya Orlova Sloboda, Donetskoy dorogi (for Koval'chuk).
(Railroads--Labor productivity)

KUKUSHKIN, V.V.

Tunnel diodes with regulated reactance. Radiotekh. i elektron. 8 no.9:1643-1645 S '63. (MIRA 16:9)
(Tunnel diodes)

L 21673-66
ACC NR: AP6003558 SOURCE CODE: UR/0109/66/011/001/0123/0134

AUTHOR: Shinkarenko, V. G.; Kukushkin, V. V.

ORG: none

TITLE: Investigation of minimum noise factor in a tunnel-diode mixer

SOURCE: Radiotekhnika i elektronika, v. 11, no. 1, 1966, 123-134

TOPIC TAGS: frequency mixer, tunnel diode, tunnel diode mixer

ABSTRACT: Heretofore, studies of the noise factor in tunnel-diode mixers have been limited to the case of short-circuited image frequency. The present article offers a theoretical analysis of the minimum (single-frequency) noise factor of such a mixer operating at various image-frequency loads. Necessary and sufficient conditions for compensating shot effects in the mixer are formulated. It is found that large heterodyne signals and circuits ensuring no-load operating conditions (or image-frequency matching) are preferable for the realization of optimal conditions of noise, passband, and critical signal frequency. In the reverse problem, the noise-current-characteristic shape (as a function of nondimensional time) is close to a

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UDC: 621.396.622.23:621.391.883.22

L 21673-66

ACC NR: AP6003558

δ-impulse when the compensation conditions are satisfied. The above conclusions are verified by a practical numerical example. "The authors wish to thank A. L. Mikaelyan for his constant attention to this work, and V. P. Ananyeva, M. V. Ansheles, and L. M. Nutovich for carrying out the calculations involved." Orig. art. has: 9 figures and 31 formulas.

SUB CODE: 09 / SUBM DATE: 07Sep64 / ORIG REF: 001 / OTH REF: 005

Card 2/2 MJS

L 55058-65 EEO-2/EWT(1)/EEC-4/EED-2/EWA(h) Pn-4/Pl-4 JM
ACCESSION NR: AP5013355 UR/0109/65/010/005/0953/0966
621.382.23.014.2:621.317.765.8

AUTHOR: Kukushkin, V. V. 37 B

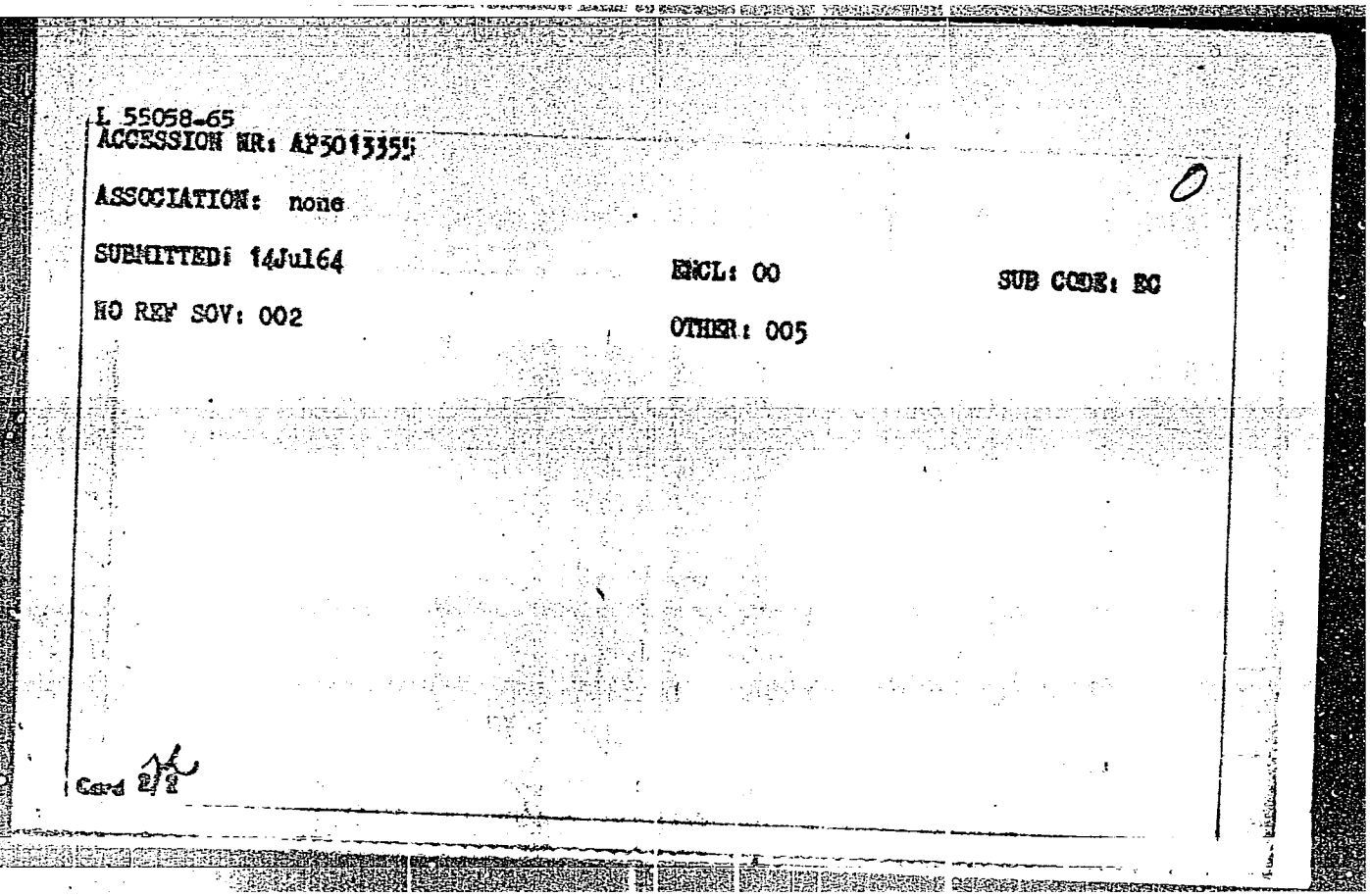
TITLE: Tunnel diode as a noise generator 25 intended for measuring the parameters of a tunnel mixer

SOURCE: Radiotekhnika i elektronika, v. 10, no. 5, 1965, 963-966

TOPIC TAGS: tunnel diode, noise generator, tunnel diode mixer

ABSTRACT: No method has been known for measuring the nominal gain and noise factor of a mixer with negative output resistance. The present short article suggests to measure the above parameters of a tunnel mixer and also the noise temperature of a IF-amplifier connected to such a mixer by means of a tunnel diode working as a calibrated negative-resistance shot-noise generator. By reasonable selection of the diode capacitance, loss resistance, and operating frequency, the thermal noise and the 1/f-type noise are reduced to a negligible value as compared to the shot noise of the tunnel diode. Formulas are derived for designing such a tunnel-diode [illegible]ator. Orig. art. has: 2 figures and 17 formulas.

Card 1/2



L 55058-65
ACCESSION NR: AP5013355

ASSOCIATION: none

SUBMITTED: 14Jul64 ENCL: 00 SUB CODE: EC

NO REF SOV: 002 OTHER: 005

Card 1/1

L 2067-66 EWT(l)/EWT(m)/EWP(t)/EWP(b)/EWA(h) IJP(c) JD
ACCESSION NR: AR5022442 UR/0109/65/010/009/1723/1724
621.382.2.001.5:546.289

AUTHOR: Kmita, A. M.; Kukushkin, V. V.

TITLE: Noise temperature of a backward germanium-diode mixer

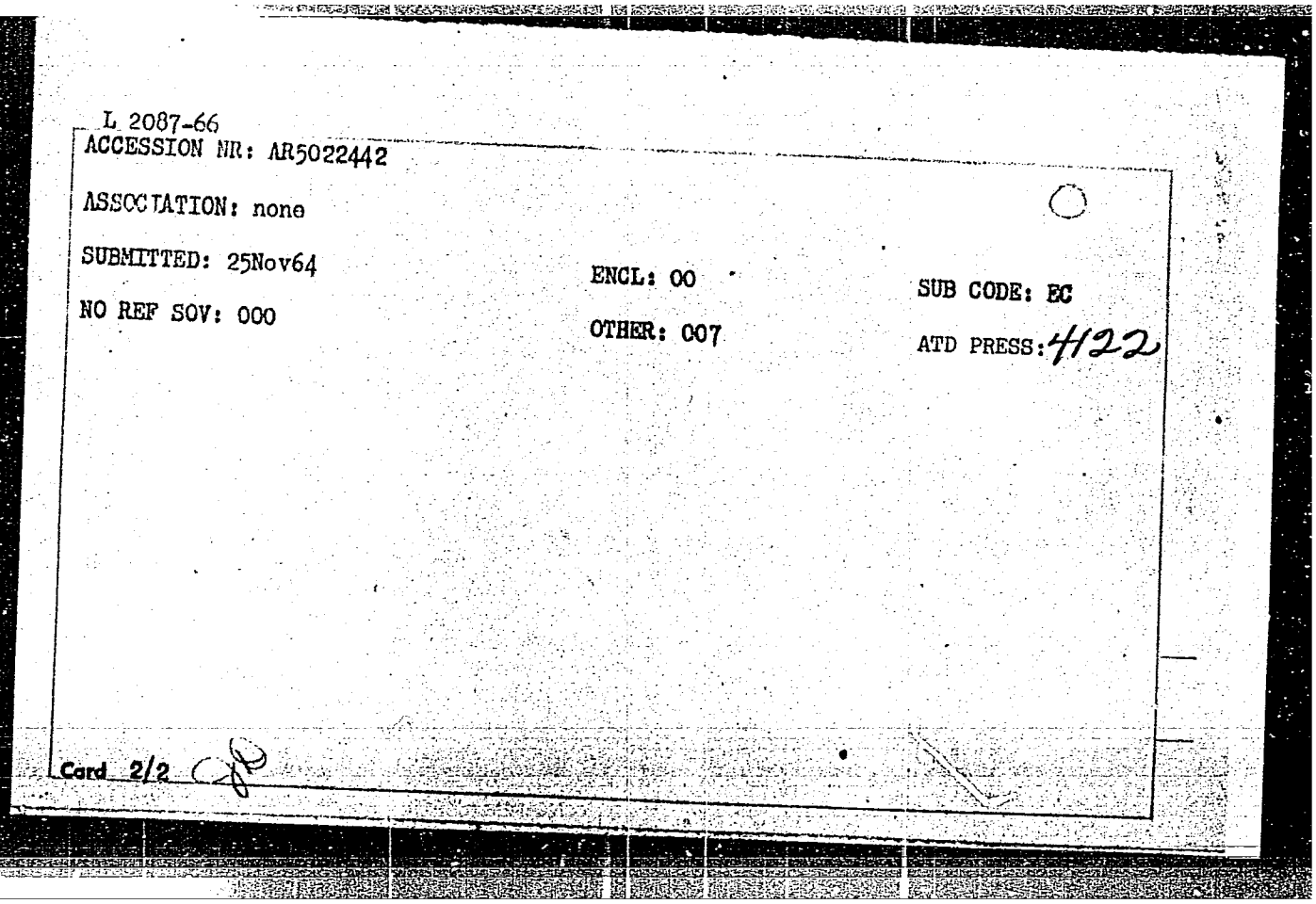
35
B

SOURCE: Radiotekhnika i elektronika, v. 10, no. 9, 1965, 1723-1724

TOPIC TAGS: backward diode mixer, noise temperature

ABSTRACT: Published formulas for noise current (e.g., by B. E. Turner, et al., Canad. J. Phys., 1964, 42, 6, 1046) permit determining this current at positive and 0—60 mv negative bias voltages. A special circuit is suggested for measuring the noise current as a function of negative bias voltages of 100—150 mv, i.e., in the zone where backward-diode mixers have optimal parameters. In this circuit, the internal diode noise is compared with the noise produced by a noise generator in a resistance R_1 equal to the differential resistance of the diode at a given bias voltage; R_1 is kept at liquid-nitrogen temperature. It was found that the noise temperature depends only slightly on the heterodyne voltage and does not exceed 1.2—1.3 at heterodyne voltages of 50—150 mv, which corresponds to a near-minimum conversion loss. "The authors wish to thank Ye. A. Panteleymonova for providing the diodes." Orig. art. has: 2 figures and 3 formulas. [03]

Card 1/1



L 2087-66
ACCESSION NR: AR5022442

ASSOCIATION: none

SUBMITTED: 25Nov64 ENCL: 00 SUB CODE: EC

NO REF SOV: 000 OTHER: 007 ATD PRESS: 4122

Card 2/2

L 10459-67 EWT(1)/EEC(k)-2 IJP(c)
ACC NR: AP6023883 SOURCE CODE: UR/0109/66/011/007/1337/1340

36

AUTHOR: Kukushkin, V. V.; Shinkarenko, V. G.

ORG: none

TITLE: Effect of the mode of operation and the shape of I-V characteristic of the tunnel diode upon the noise factor of a mixer

SOURCE: Radiotekhnika i elektronika, v. 11, no. 7, 1966, 1337-1340

TOPIC TAGS: tunnel diode, frequency mixer

ABSTRACT: Calculations are reported of the optimal noise factor and of the conversion factor vs. heterodyne-oscillation amplitude, for the case of an image-frequency short-circuit; the bias voltage is assumed to be constant; the frequency mixer has no IF amplifier; the diode capacitance and series resistance are assumed to be zero. Formulas developed earlier by the authors (Rad. i elektronika, 1966, v. 11, no. 1, 103) are used for the calculations. It is found that the lower is the voltage corresponding to the maximum current (lightly-doped-Ge and gallium-antimonide diodes), the lower noise factor can be attained. "The authors wish to thank A. N. Kovalev for submitting I-V characteristics of sereval diodes, L. M. Nutovich for carrying out the calculations, and N. Ye. Skvortsova for her perusal of the manuscript." Orig. art. has: 2 figures and 1 table.

SUB CODE: 09 / SUBM DATE: 24Sep65 / ORIG REF: 002/ OTH REF: 001

Card 1/1 UDC: 621.396.622.23: 621.391.883.22

SHIRYAYEVKO, V.G.; KUKUSHKIN, V.V.

Study of the minimum noise coefficient of a tunnel diode mixer circuit. Radiotekh. i elektron. 11 no.1:123-134 Ja '66.
(MIRA 19:1)

1. Submitted September 7, 1964.

KUKUSHKIN, Ya.M., inzh.

Standardized precast bridge footings. Transp. stroi. 12 no.5:40-41 My '62. (MIRA 15:6)
(Bridges--Foundations and piers)

KUKUSHKIN, Ye.

Change the procedure for planning the issue of credit to individual housing construction. Fin. SSSR 19 no. 7:65-66 Jl '58. (MIRA 11:8)

1. Nachal'nik otdela kreditovaniya individual'nogo zhilishchnogo stroitel'stva Vladimirskogo oblkombanka
(Vladimir Province--Dwellings--Finance)

L 22356-66

ACC NR: AP6013268 SOURCE CODE: UR/0413/66/000/008/0060/0060

INVENTOR: Shcherbakov, K. K.; Bogdanov, V. V.; Kukushkin, Yu. A.

ORG: none

TITLE: Device for measuring the volume of inhaled and exhaled air. Class 30, No. 180735

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 8, 1966, 60

TOPIC TAGS: respiration, human physiology, respiration sensor

ABSTRACT: An Author Certificate has been issued for a device to measure the volume of inhaled and exhaled air. It consists of active

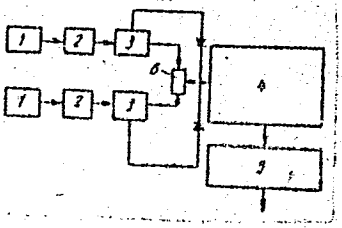


Fig. 1.

1 - inhalation and exhalation sensors; 2 - impulse amplifier-shapers; 3 - calibrators; 4 - reversible trigger counter; 5 - adder; 6 - transducer

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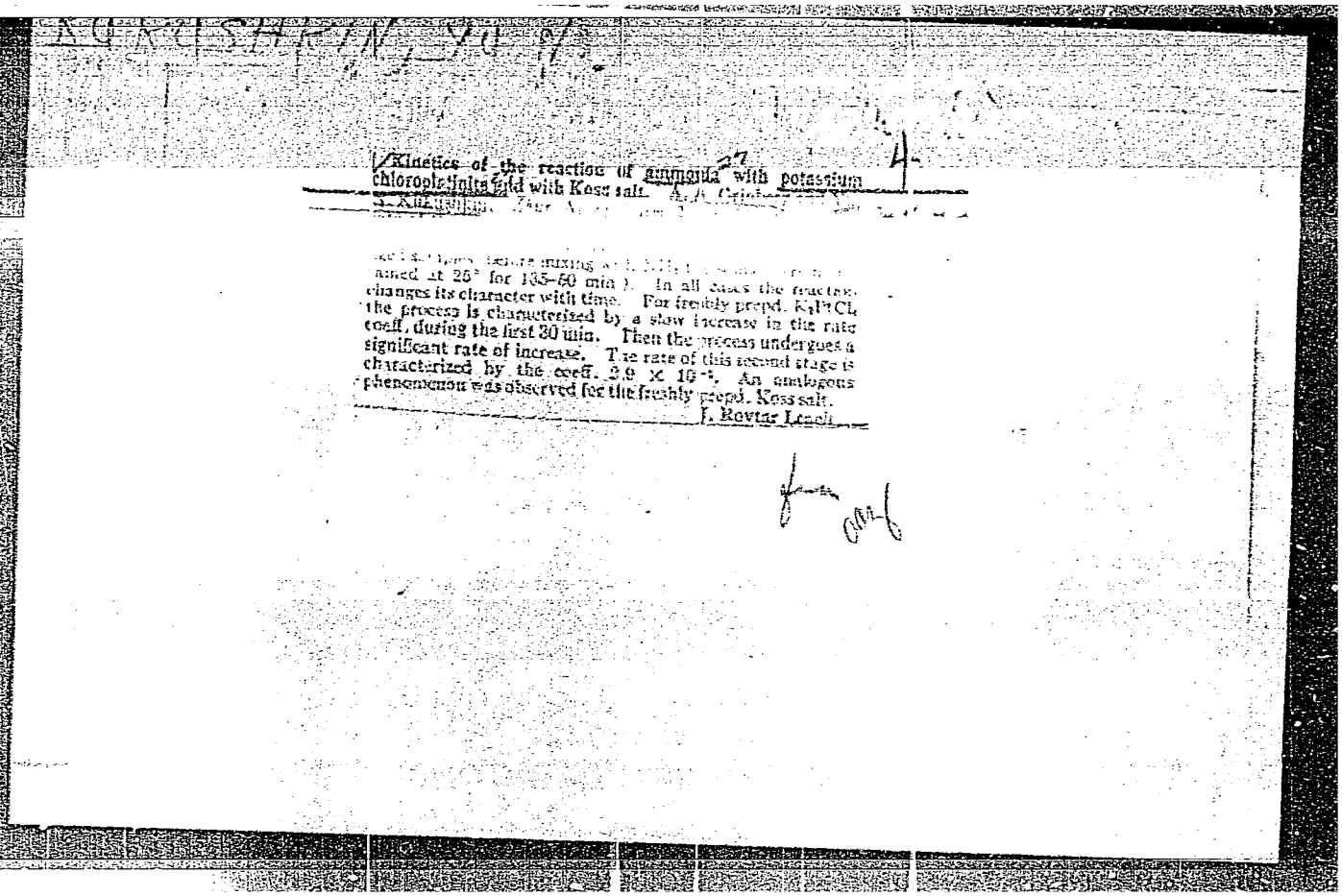
UDC: 625.47:
:612.2-087

L 22356-66
ACC NR: AP6013268

sensors of inhalation and exhalation, impulse amplifier-shapers, and small batteries. To increase the accuracy of measurement and to decrease the weight and dimensions of the apparatus, a sequential count transducer and an adder, the voltage of which varies proportionally with air volume, has been added. The output of the transducer, which varies proportionally with the rate of air flow through the sensors, is recorded in units of volume by a reversible trigger counter. (see Fig. 1). Orig. art. has: 1 figure. [CD]

SUB CODE: 06/ SUBM DATE: 31Oct64/ ATD PRESS: 4240

Card 2/2 dda



Kinetics of the reaction of ammonia with potassium chloroplatinite and with Reiset salt.

[illegible] aged at 25° for 135–60 min.). In all cases the reaction changes its character with time. For freshly prepd. K_2PtCl_4 the process is characterised by a slow increase in the rate coeff. during the first 30 min. Then the process undergoes a significant rate of increase. The rate of this second stage is characterized by the coeff. 2.9×10^{-4}. An analogous phenomenon was observed for the freshly prepd. Reiset salt.

I. Rovtar Lnedl.

KUKUSHKIN, Yu. N.

GRINBERG, A.A.; KUKUSHKIN, Yu.N.

Kinetics of the hydrolysis of certain complex compounds of bivalent platinum. Zhur. neorg. khim. 2 10:2360-2367 O '57. (MIRA 11:3)
(Platinum compounds) (Hydrolysis)

KUKUSHKIN, Yu.N.

The reactivity of ammonia coordinated in the inner sphere of tetravalent platinum. Zhur. neorg. khim. 2 10:2371-2374 '57.
(Ammonia) (Platinum) (MIRA 11:3)

KUKUSHKIN, Yu. N., Cand Chem Sci -- (diss) "Kinetic studies of substitution reactions in certain compounds of bivalent platinum. On the ~~matrix of~~ mutual ~~interaction~~ effect of coordinated groups." Len, 1958. 9 pp (Min of Higher Education USSR, Len Technol Inst im Lensovet), 100 copies (KL, 15-58, 112)

AUTHORS: Grinberg, A. A., Kukushkin, Yu. N. 78-3-6-6/30

TITLE: On the Production of Cossa Salt (K voprosu o poluchenii soli kossa)

PERIODICAL: Zhurnal Neorganicheskoy Khimii, 1958, Vol. 3, Nr 6, pp. 1312-1314 (USSR)

ABSTRACT: Kinetic investigations of the reaction of $K_2[PtCl_4]$ and $K[PtNH_3 \cdot Cl_3]$ with ammonia were performed. The smaller yield of $K[PtNH_3 \cdot Cl_3]$ due to the direct action of ammonia on $K_2[PtCl_4]$ was discussed. 46 % of the Cossa salt which can be produced theoretically were obtained by the Lebedinskiy - Golovnya method.
It was found that the greatest yield of Cossa salt in the calculated equivalent amount can be obtained in the boiling Peyrone salt - cis $[Pt(NH_3)_2Cl_2]$ with KCl and acetic acid. There are 8 references, 6 of which are Soviet.

SUBMITTED: October 27, 1957

AVAILABLE: Library of Congress

Card 1/1 1. Chemistry 2. Salt--Production

AUTHORS: Grinberg, A. A., Kukushkin, Yu. N. SOV/78-3-8-16/48

TITLE: Kinetic Investigations of Some Complex Compounds of Bivalent Platinum (Kineticheskiye issledovaniya nekotorykh kompleksnykh soyedineniy dvukhvalentnoy platiny). On the Mutual Influence of Coordination Groups (O vzaimnom vliyanii koordinirovannykh grupp)

PERIODICAL: Zhurnal neorganicheskoy khimii, 1958, Vol. 3, Nr 8, pp. 1810-1817 (USSR)

ABSTRACT: The kinetics of the interaction of ammonia with $[Pt(NH_3)_3Cl]Cl$ and $K[PtPyCl_3]$, as well as the kinetics of the interaction of pyridine with $K_2[PtCl_4]$, $K[PtPyCl_3]$ and $K[PtNH_3Cl_3]$ were investigated. It was shown that in the compounds $K_2[PtCl_4]$, $K[PtNH_3Cl_3]$, -trans-$[Pt(NH_3)_2Cl_2]$ and $[Pt(NH_3)_3Cl]$ the velocity of interaction of the complexes with NH_3- and OH- groups increases from $K_2[PtCl_4]$ to trans-$[Pt(NH_3)_2Cl_2]$, and then decreases to $[Pt(NH_3)_3Cl]Cl$. This

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dependence of the velocity of interaction is based on the cis-effect of the NH_3- molecules on the coordination group $Cl-Pt^{2+}-Cl$.
Based on the comparative investigations of the velocity of interaction of pyridine in $K_2[PtCl_4]$ and $K[PtPyCl_3]$ it was found that also pyridine can exert a cis-effect. The cis-effect of pyridine in the system investigated is greater than the cis-effect of ammonia.
There are 4 figures, 1 table, and 17 references, 11 of which are Soviet.

SUBMITTED: December 12, 1957

Card 2/2

5(4) SOV/78-4-2-12/40

AUTHORS: Grinberg, A. A., Kukushkin, Yu. N.

TITLE: On the Kinetics of the Interaction of Ammonia With Several Salts of the Type $K_2[PtX_4]$ and $K[PtNH_3X_3]$ (O kinetike vzaimodeystviya ammiaka s nekotorymi solyami tipa $K_2[PtX_4]$ i $K[PtNH_3X_3]$)

PERIODICAL: Zhurnal neorganicheskoy khimii, 1959, Vol 4, Nr 2, pp 319-324 (USSR)

ABSTRACT: The interaction of ammonia with the salts $K_2[PtCl_4]$, $K[PtNH_3Cl_3]$, $K_2[PtBr_4]$, and $K[PtNH_3Br_3]$ was examined in various concentrations and at various temperatures. It was found that the reaction rate of the interaction depends on the concentration of ammonia and the complex salts. The kinetic data on the interactionsin the systems $K_2[PtCl_4]$-$2NH_3$ and $K[PtNH_3Cl_3]$-NH_3 are shown in tables 1 and 2. The results show that the ammonia molecule in the complex compound $K[PtNH_3X_3]$ (X=Cl, Br) considerably increases the mobility of the addenda which are in cis-position to ammonia.

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On the Kinetics of the Interaction of Ammonia With Several Salts of the Type $K_2[PtX_4]$ and $K[PtNH_3X_3]$

This cis-influence of the ammonia molecule on the reactivity is stronger at the coordinate Br-Pt^{II}-Br than in the chlorine system Cl-Pt^{II}-Cl. The activation energy in the system $K_2[PtBr_4]$-$2NH_3$ is somewhat higher than in the respective chlorine system. There are 4 figures, 5 tables, and 5 references, 3 of which are Soviet.

SUBMITTED: November 22, 1957

Card 2/2

05856
SOV/78-4-11-9/50

5(2)
AUTHOR: Kukushkin, Yu.N.

TITLE: On the Reactivity of Ammonia in the Internal Sphere of Tetravalent Platinum

PERIODICAL: Zhurnal neorganicheskoy khimii, 1959, Vol 4, Nr 11, pp 2460-2465 (USSR)

ABSTRACT: In a previous article (Ref 1), the author obtained a substance by the action of Cl on $[Pt(NH_3)_3Cl_3]Cl$ to which the formula $[Pt(NH_3)_2NCl_2Cl_3]$ was assigned. In this article, the author deals with the problem as to whether the NH_3 coordinated in the internal sphere of Pt^{IV} maintains its ability to form chloramines also in other similar compounds such as in the two isomers $[Pt(PyNH_3)_2Cl_2]Cl_2$ and $[PtPy_2(NH_3)_2Cl_2]Cl_2$. (Py = pyridine). The author first checked the constitution of the compound $[Pt(NH_3)_2NCl_2Cl_3]$ since also the formation of $[Pt(NH_3)_3Cl_3]Cl.Cl$ could not be excluded in principle. The chloramine structure could be confirmed on account of the titration of the compound with

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On the Reactivity of Ammonia in the Internal Sphere of Tetravalent Platinum

$FeSO_4$ according to A.A. Grinberg and L.K. Simonova and in consideration of the results obtained by A.A. Grinberg and B.V. Ptitsyn (Ref 4). Chlorination of the compound $[Pt(PyNH_3)_2Cl_2].Cl_2$ produced according to A.M.Rubinshteyn (Ref 2) yielded an explosive compound whose analysis and behavior as a nonelectrolyte, which was confirmed by measuring the molecular electrical conductivity (Table 2), led to the formula $[Pt(PyNCl_2)_2Cl_2]$. The NH_3 groups which are here in cis-position, are thus able to form chloramine. On chlorination the isomeric compound $[PtPy_2(NH_3)_2Cl_2]Cl_2$ yielded a nonexplosive substance which corresponds to the formula $[PtPy_2NH_3NCl_2Cl_2]Cl.1.5H_2O$. Only one of the two NH_3 groups which are here in trans-position can be transformed into the chloramine. The different degree of solubility of the two isomers and the ability of $[PtPy_2NH_3NCl_2Cl_2]Cl$ to produce a difficultly soluble chloroplatinate may be employed to differentiate the two isomers. There are 4 tables and 5 Soviet

On the Reactivity of Ammonia in the Internal Sphere of Tetravalent Platinum

05856
SOV/78-4-11-9/50

references.

SUBMITTED: August 5, 1958

Card 3/3

85598

S/078/60/005/009/021/040/XX
B017/B058

11.2205

AUTHOR: Kukushkin, Yu. N.

TITLE: The Problem of the Reactivity of Ammonia Coordinated in the Inner Sphere of Tetravalent Platinum

PERIODICAL: Zhurnal neorganicheskoy khimii, 1960, Vol. 5, No. 9, pp. 1943 - 1947

TEXT: The reaction of chlorine with $[Pt(NH_3)_5OH]Cl_3$ was studied. It was established that by chlorination of $[Pt(NH_3)_5Cl]Cl_3$ a molecule of the ammonia of the inner sphere is converted into an NCl_2 group. The electrolytic structure was confirmed by measurements of the molecular electrical conductivity (Table 1). The reaction is represented by the following equation:

$$[Pt(NH_3)_5Cl]Cl_3 + 2Cl_2 \rightleftharpoons [Pt(NH_3)_4NCl_2Cl]Cl_2 + 3HCl.$$

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85598

The Problem of the Reactivity of Ammonia Coordinated in the Inner Sphere of Tetravalent Platinum

S/078/60/005/009/021/040/XX
B017/B058

In the reaction of the chlorination product with $FeSO_4$ solutions, a white precipitate separates out which presumably has the following composition: $\left[Pt(NH_3)_5Cl\right]\begin{matrix}Cl\\SO_4\end{matrix}$. The reaction of chlorine with $\left[Pt(NH_3)_5OH\right]Cl_3$ leads to a displacement of the hydroxyl group of the inner sphere of the complex by chlorine under the formation of $\left[Pt(NH_3)_3(NCl_2)_2Cl\right]Cl$. The molecular electrical conductivity of $\left[Pt(NH_3)_3(NCl_2)_2Cl\right]Cl$ at 25°C and V = 1000 was determined, and is given in Table 3. It may be seen from a comparison of Tables 1 and 3 that the hydrolysis of $\left[Pt(NH_3)_4NCl_2Cl\right]Cl_2$ proceeds faster than that of the compound $\left[Pt(NH_3)_3(NCl_2)_2Cl\right]Cl$. The content of chloramine groups of these compounds was determined by a reduction with $FeSO_4$

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The Problem of the Reactivity of Ammonia Coordinated in the Inner Sphere of Tetravalent Platinum

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B017/B058

and subsequent titration of the $FeSO_4$ excess with permanganate. The results of back-titration of $[Pt(NH_3)_4NCl_2Cl]Cl_2$ and $[Pt(NH_3)_4(NCl_2)_2Cl]Cl_2$ are collected in Tables 2 and 4. The chlorination of hydroxopentammine proceeds in several stages. The presence of ammonia, which may also be replaced by chlorine, in the inner sphere of the complex weakens the bond of platinum with the hydroxo group. The author mentions L. A. Chugayev, and thanks A. A. Grinberg for a discussion. There are 4 tables and 7 references: 4 Soviet, 2 US, and 1 German.

SUBMITTED: June 4, 1959

Card 3/3

S/020/60/132/05/27/069
B011/B126

AUTHORS: Grinberg, A. A., Academician, Kukushkin, Yu. N.

TITLE: The Hydrolysis Kinetics of Some Complex Compounds of Pt (IV)

PERIODICAL: Doklady Akademii nauk SSSR, 1960, Vol. 132, No. 5, pp. 1071 - 1073

TEXT: The object of this paper is to study the hydrolysis kinetics of the following complexes: $Na_2[PtCl_6]$, $k[PtNH_3Cl_5]$, $[Pt(NH_3)_2Cl_4]$, $[Pt(NH_3)_3Cl_3]Cl$, trans-$[Pt(NH_3)_4Cl_2](NO_3)_2$, $[Pt(NH_3)_5Cl]Cl_3$, and $k[PtPyCl_5]$ (Py = pyridine). Hitherto only the isomeric diammines of this series have not been investigated. In their experiments, carried out in darkness, the authors used red-lacquered receptacles. The experiments showed the expected variety in the hydrolysis kinetics of single members of this series. The dependence of the hydrolysis rate on alkali concentration is expressed in $k[PtNH_3Cl_5]$ and $[Pt(NH_3)_4Cl_2](NO_3)_2$, and also

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with a certain approximation in $[Pt(NH_3)_5Cl]Cl_3$ by an equation of the first order. The hydrolysis rate is independent of the alkali concentration for triammine and pyridine compounds. These compounds are reduced during hydrolysis to compounds of Pt (II), as against the unusually high hydrolysis rate of mono-, tri-, and tetrammine with respect to the concentration of the complex. When temperature is raised, the reduction is greater. Chloroplatinate, pyridine monoammine, and -pentammine were not even reduced by alkali on heating under the conditions of the experiment. The authors give a scheme of the hydrolysis reaction, and state that the mechanism of the hydrolysis of trans-$[Pt\ en_2Cl_2]^{+2}$ does not reflect the process taking place in the solution. The mechanism of the interaction of this compound with alkali is much more complicated. Corresponding investigations are about to be completed, and the results will soon be published. The authors refer to papers by O.Ye. Zvyagintsev and Ye.F. Karandasheva (Ref. 1). There are 9 references: 5 Soviet and 4 American.

The Hydrolysis Kinetics of Some Complex Compounds of Pt (IV)

S/020/60/132/05/27/069
B011/B126

ASSOCIATION: Radiyevyy institut im. V. G. Khlopina Akademii nauk SSSR (Radium Institute imeni V. G. Khlopin of the Academy of Sciences, USSR)

SUBMITTED: March 14, 1960

Card 3/3

KUKUSHKIN, Yu.N.; ZATSEPINA, N.N.

Reactivity of amines in the inner sphere of tetravalent platinum. Zhur. neorg. khim. 6 no.1:120-123 '61. (MIRA 14:2)
(Platinum compounds)

GRINBERG, A.A.; KUKUSHKIN, Yu.N.

Hydrolysis kinetics of some complex compounds of tetravalent platinum. Zhur.neorg.khim. 6 no.5:1084-1097 My '61. (MIRA 14:4)

(Platinum compounds)

KUKUSHKIN, Yu.N.

Reactivity of amines in the inner coordination sphere of tetravalent platinum. Zhur.neorg.khim. 6 no.5:1098-1104 My '61. (MIRA 14:4)

(Platinum compounds)

KUKUSHKIN, Yu.N.

Reactivity of amines in the inner sphere of the tetravalent platinum. Zhur.neorg.khim. 6 no.8:1762-1768 Ag '61. (MIRA 14:8)
(Amines) (Platinum)

KUKUSHKIN, Yu.N.

Reactivity of amines in the inner sphere of tetravalent platinum.
Zhur.neorg.khim. 6 no.11:2451-2456 '61. (MIRA 14:10)
(Platinum compounds) (Amines)

GRINBERG, A.A., akademik; KUKUSHKIN, Yu.N.

Interaction between alkali and trans-($Pten_2Cl_2$)Cl_2.
Dokl. AN SSSR 140 no.5:1076-1078 O '61. (MIRA 15:2)

1. Radiyevyy institut im. V.G.Khlopina AN SSSR.
(Platinum compounds)
(Alkalies)

KUKUSHKIN, Yu.N.

Reactivity of amines in the inner sphere of tetravalent platinum.
Zhur.neorg.khim. 7 no.4:769-775 Ap '62. (MIRA 15:4)
(Platinum compounds) (Amines)

GRINBERG, A.A., akademik; KUKUSHKIN, Yu.N.

On the existence of ammoniated salts of quadrivalent platinum.
Dokl.AN SSSR 145 no.1:97-99 Jl '62. (MIRA 15:7)
(Platinum compounds) (Ammines)

KUKUSHKIN, Yu. N.

Interaction of chlorine with ethylenediamine, a constituent of a quadrivalent platinum complex. Zhur. neorg. khim. 7 no.8:1795-1800 Ag '62. (MIRA 16:6)

(Chlorine) (Ethylenediamine)
(Platinum compounds)

KUKUSHKIN, Yu.N.

Reaction of chlorine with palladium and platinum aminates.
Zhur.neorg.khim. 8 no.4:817-822 Ap '63. (MIRA 16:3)
(Palladium compounds) (Platinum compounds) (Chlorine)
(Amino group)

KUKUSHKIN, Yu.N.

Reaction of bromine with some tetravalent platinum aminates. Zhur.-neorg.khim. 8 no.4:823-829 Ap '63. (MIRA 16:3)
(Platinum compounds) (Amino group) (Bromine)

VARSHAVSKIY, Yu.S.; KUKUSHKIN, Yu.N.

Infrared spectra of tetravalent platinum complex compounds containing chloramines. Zhur. neorg. khim. 10 no.6:1332-1337 Je '65. (MIRA 18:6)

KUKUSHKIN, Yu.N.

Absorption spectra of complex compounds of platinum containing chloramines. Zhur. neorg. khim. 10 no.3:601-607 Mr '65.
(MIRA 18:7)

KUKUSHKIN, Yu.N.

Kinetics of interaction of chlorine with ammonia, present in the complex of tetravalent platinum. Zhur. neorg. khim. 10 no.7:1550-1554 Jl '65.

Mechanism underlying the interaction of chlorine with ammonia present in the complex of tetravalent platinum. Ibid.:1555-1561 (MIRA 18:8)

POZIN, M.Ye.; KUKUSHKIN, Yu.N.

Bibliography. Zhur.prikl.khim. 38 no.11:2629-2631 N '65.
(MIRA 18:12)

KUKUSHKIN, Yu.N.; V'YUGINA, A.F.

Isotope exchange of chlorine in the dichloramide group present in a complex of tetravalent platinum. Radiokhimiia 6 no.3: 336-342 '64.

I.I. Cherniaev's correlations of transeffect. Ibid.: 342-347
(MIRA 18:3)

DROBIZHEV, V.Z.; KUKUSHKIN, Yu.S.; PAPIN, L.M.; POLYAKOVA, N.V., red.; BEYLINA, TS.L., tekhn.red.

[V.I. Lenin as the leader of our great construction program; collected reminiscences about V.I.Lenin's work in the field of the national economy] V.I.Lenin vo glave velikogo stroitel'stva; sbornik vospominanii o deiatel'nosti V.I.Lenina na khoziaistvennom fronte. Moskva, Gos.izd-vo polit.lit-ry, 1960. 324 p.
(MIRA 13:4)

(Lenin, Vladimir Il'ich, 1870-1924)
(Russia--Economic conditions)

KUKUSHKIN, Yu.V.

Changing the automatic block system. Sbor.rats.predl.vnedr.v proizv. no.5:59-61 '60. (MIRA 14:8)

1. Nizhne-Tagil'skiy metallurgicheskiy kombinat.
(Railroads--Signaling--Block system)

S/2892/63/000/002/0162/0170

ACCESSION NR: AT4021267

AUTHOR: Kukushkin, Yu. V., Konstantinov, I. Ye.

TITLE: Investigation of β radiation spectra after passing through matter

SOURCE: Voprosy* dozimetrii i zashchity* ot izlucheniy, no. 2, 1963, 162-170

TOPIC TAGS: β radiation, β spectrum, β particles, scintillation spectrometer, cesium, aluminum, celluloid, Curie-Fermi graph

ABSTRACT: Investigation of β spectra of cesium 137 after passing through an absorber with a low atomic number is conducted. The problem arises in the identification of the content of these elements in thick β preparations by means of the spectrometric method. The β spectra are measured with a scintillation spectrometer, the schematic of which is given. Cesium 137 was the source and the radiation was passed through aluminum foil or celluloid. The obtained β spectra are presented in Curie-Fermi graphs. The authors did not succeed in plotting graphs in the case of great thicknesses of the absorber. The results agree well with the results arrived by Aglintsev, K. K., Kasatkin, V. P. (Atomnaya energiya, 7, Vy*p. 2, 138 (1959)). Orig. art. has: 8 figures.

Card 1/2

ACCESSION NR: AT4021267

ASSOCIATION: Moskovskiy inzhenerno-fizicheskiy institut (Moscow Physics and Engineering Institute)

SUBMITTED: 00 DATE ACQ: 06Apr64 ENCL: 00

SUB CODE: NS, SD NO REF SOV: 003 OTHER: 001

Card 2/2

VYDRINA, Zh.A.; PANARIN, A.P.; UZBERG, A.I.; Prinimali uchastiye: BARANOVA, N.N.; KOZHEVNIKOVA, Ye.K.; KUKUSHKINA, A.P.; SAGATULINA, Ye.A.

Testing periclase-spinel firebricks in open-hearth furnace crowns. Ogneupory 28 no.5:206-212 '63. (MIRA 16:6)

1. Nizhne-Tagil'skiy metallurgicheskiy kombinat im. V.I. Lenina (for Vydrina). 2. Zavod "Magnezit" (for Panarin, Uzberg).
(Firebrick--Testing)
(Open-hearth furnaces--Design and construction)

17(3) SOV/20-59-124-2-59/71

AUTHORS: Kudryashov, B. A., Andreyenko, G. V., Kukushkina, G. V.

TITLE: Electrophoretic Properties of Some Protein Components of Blood Coagulation (Elektroforeticheskiye svoystva nekotorykh belkovykh komponentov svertyvaniya krovi)

PERIODICAL: Doklady Akademii nauk SSSR, 1959, Vol 124, Nr 2, pp 452-455 (USSR)

ABSTRACT: Denotations given by various scientists for the components mentioned in the title, i.e. for one and the same substance often differ from each other (Refs 1-7). It is possible that further investigations of the factors of coagulation which are now known will reduce their number; it is also possible that one and the same substance shows different properties under different conditions. A careful comparative investigation of the subject mentioned in the title, i.e. of those components which participate in the formation of thrombokinase is therefore important. For this purpose the authors investigated electrophoretically the factors X and VII, thrombotropine and thrombokinase. The preparations from the factors VII and X were isolated from the blood serum of horses and rats (according to Refs 12,3). The tissue thrombokinase was produced as suspension from the brain of white rats which had been purified from investing tissues and blood vessels (Ref 14). Thrombotropine was .

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Electrophoretic Properties of Some Protein Components of Blood Coagulation

isolated by electrophoretic separation of the blood plasma with starch as adsorbent and was then obtained by means of washing out the active fraction by a physiological salt solution (Ref 11). Figures 1 and 2 show the electrophoresis diagram of the factors VII and X. Table 1 shows the composition of the protein fraction of the blood serum and the factors VII and X. On the basis of the results obtained the authors arrive at the following conclusion: 1) The 3 protein factors which participate in the first phase of the blood coagulation, i.e. the factors VII and X as well as thrombotropine have different electrophoretic mobility. Therefore they belong to different protein groups. 2) Factor VII is not homogeneous; it forms 2 clearly distinct bands on the electrophoresis diagram which correspond to the α_2- and γ-globulins of the blood serum. 3) The factor X is homogeneous and is an α-globulin; the same holds also for thrombotropine. 4) It may be assumed that the factor VII consists of blood thrombokinase (immobile fraction) and of thrombotropine (mobile fraction).- There are 4 figures, 2 tables, and 16 references, 3 of which are Soviet.

SOV/20-59-124-2-59/71

Electrophoretic Properties of Some Protein Components of Blood Coagulation

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

PRESENTED: August 26, 1958, by V. A. Engel'gardt, Academician

SUBMITTED: July 24, 1958

Card 3/3

ACC NR: AP6032114 SOURCE CODE: UR/0301/66/012/005/0452/0455

AUTHOR: Kukushkina, G. V.; Gorbacheva, L. B.; Emanuel', N. M.

ORG: Institute of Chemical Physics, Academy of Sciences SSSR, Moscow (Institut khimicheskoy fiziki AN SSSR)

TITLE: Inhibition of the biosynthesis of protein and nucleic acids by phenolic compounds in vivo

SOURCE: Voprosy meditsinskoy khimii, v. 12, no. 5, 1966, 452-455

TOPIC TAGS: biochemistry, biosynthesis, protein ~~synthesis~~, nucleic acid, ~~nucleic acid synthesis~~, phenol derivative, metabolic effect, ionole

ABSTRACT: *In vivo* experiments on mice affected with Erlich ascites tumor and hepatoma XXII showed that the phenol derivatives propylgallate and ionole (4-methyl-2,6-di-tert-butyl-phenol) inhibited protein and nucleic acid synthesis in some organs and tissues. Propylgallate did not affect protein biosynthesis in normal kidney tissue but was effective against cancerous tissue. A 200 mg/kg dose of ionole suppressed uptake of C_{14} labeled amino acids almost completely. Further experiments showed that the cellular nucleic acid fractions from cancerous cells were the most sensitive to the action of these compounds. [WA-50; CBE No. 12]

SUB CODE: 06/ SUBM DATE: 19Nov64/ ORIG REF: 014/ OTH REF: 002/
Card 1/1 UDC: 615.778.1-092:612.015.348-064+616.015.348.014.46-064:615.781

ACC NR: AP6032114 SOURCE CODE: UR/0301/66/012/005/0452/0455

AUTHOR: Kukushkina, G. V.; Gorbacheva, L. B.; Emanuel', N. M.

ORG: Institute of Chemical Physics, Academy of Sciences SSSR, Moscow (Institut khimicheskoy fiziki AN SSSR)

TITLE: Inhibition of the biosynthesis of protein and nucleic acids by phenolic compounds in vivo

SOURCE: Voprosy meditsinskoy khimii, v. 12, no. 5, 1966, 452-455

TOPIC TAGS: biochemistry, biosynthesis, protein ~~synthesis~~, nucleic acid, ~~nucleic acid biosynthesis~~, phenol derivative, metabolic effect, ionole

ABSTRACT: *In vivo* experiments on mice affected with Erlich ascites tumor and hepatoma XXII showed that the phenol derivatives propylgallate and ionole (4-methyl-2,6-di-tert-butyl-phenol) inhibited protein and nucleic acid synthesis in some organs and tissues. Propylgallate did not affect protein biosynthesis in normal kidney tissue but was effective against cancerous tissue. A 200 mg/kg dose of ionole suppressed uptake of C_{14} labeled amino acids almost completely. Further experiments showed that the cellular nucleic acid fractions from cancerous cells were the most sensitive to the action of these compounds. [WA-50; CBE No. 12]

SUB CODE: 06/ SUBM DATE: 19Nov64/ ORIG REF: 014/ OTH REF: 002/

Card 1/1 UDC: 615.778.1-092:612.015.348-064+616.015.348.014.46-064:615.778.1

KNORRE, D.G.; KUKUSHKINA, G.V.; MAMAYEV, V.P.

Kinetics of the hydrolysis of alanylglycylglycine methyl ester in aqueous solution. Kin.i kat. 1 no.2:197-202 Jl-Ag '60.
(MIRA 13:8)

1. Institut khimicheskoy fiziki Akademii nauk SSSR.
(Glycine) (Hydrolysis)

KUKUSHKINA, G.V.; GORBACHEVA, L.B.; EMANUEL', N.M.

Kinetic characteristics of the inhibition of protein biosynthesis in cancer cells treated with alkyl phenols and chlorampenicol. Dokl. AN SSSR 146 no.5:1206-1208 O '62. (MIRA 15:10)

1. Institut khimicheskoy fiziki AN SSSR. 2. Chlen-korrespondent AN SSSR (for Emanuel').
(CHLORAMPHENICOL—PHYSIOLOGICAL EFFECT) (PHENOLS—PHYSIOLOGICAL EFFECT)

KUKUSHKINA, G.V.; GORBACHEVA, L.B.; EMANUEL', N.M.

Differences in the nature of the suppression of protein biosynthesis in cancerous cells by oxyaromatic compounds and alkylating agents. Dokl. AN SSSR 147 no.5:1218-1219 D '62.
(MIRA 16:2)

1. Institut khimicheskoy fiziki AN SSSR. 2. Chlen-korrespondent AN SSSR (for Emanuel').

(PROTEINS) (BIOSYNTHESIS) (CANCER)

VOLOBUYEV, V.I.; BIDA, L.S.; KUKUSHKINA, G.Ye.; NENARTOVICH, L.V.; KALMYKOVA, Zh.I.; KAS'YANENKO, S.I.; IYEVLEVA, L.A.; ROYEVA, Zh.M.; Prinimali uchastiye: KHMELIK, A.I.; VOSKANYAN, A.O.; SHAPOVALOVA, L.P.

New wholesale prices for cast iron, blast furnace ferroalloys, open-hearth and converter steel. Sbor.trud. UNIIM no.11:131-137 '65. (MIRA 18:11)

VOLOBUYEV, V.I., kand.ekonomicheskikh nauk; KHMELIK, A.I., inzh.;
NENARTOVICH, L.V., inzh.; KUKUSHKINA, G.Ye., inzh.

New technical norms for the consumption of raw materials and fuel for the production of cast iron and steel. Met. i gornorud. prom. no.3:63-69 My-Je '62. (MIRA 15:9)

1. Ukrainskiy institut metallov.
(Iron and steel plants--Equipment and supplies)
(Raw materials--Standards)

BATRAK, Ye.T.; BUBINA, N.G.; GORELOVA, T.N.; KORDIN, Yu.A.; KRYUKOV, B.I.; KUKUSHKINA, I.N.; LAZARYAN, V.A.; POLYAKOVA, Zh.D.; SHABARSHOVA, A.V. (Dnepropetrovsk)

"Study of regular displacement behaviours of bulk material over vibrating rough surface realizing given motion"

report presented at the 2nd All-Union Congress on Theoretical and Applied Mechanics, Moscow, 29 January - 5 February 1964

KUKUSHKINA, M., tekhnik po rezine

Results of the correct use of tires. Avt. transp. 37 no.8:27 Ag '59. (MIRA 12:12)

1.Avtokolonna No.11 Yaroslavskogo avtotrest.
(Automobiles--Tires)

S/799/62/000/002/001/011

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TITLE: A potential-impulse system of elements for digital machines.

SOURCE: Akademiya nauk SSSR. Institut elektronnykh upravlyayushchikh mashin. Tsifrovaya tekhnika i vychislitel'nyye ustroystva. no. 2. 1962, 3-18.

TEXT: With reference to the development of a potential-impulse system of elements, the present paper examines the potential elements of the system only. The impulse elements (the starting gate and the shaping gate) are described in another paper on pp. 19-31 of the present sbornik (Abstract S/799/62/000/002/002/011). The static trigger is described, schematically depicted, and its stability regions are circumscribed. The diode decoder is shown in a schematic circuit diagram, a schematic static calculation graph, and an analytical expression. The emitter-repeater is shown in a schematic diagram and is analytically described. The following guiding principles were observed: (1) All parts are not fully current- and voltage-loaded to ensure long service life and good timewise operational stability; (2) all elements of the system are standardized; the system consists of a trigger, a trigger-starting gate, and a pulse-shaping gate, an emitter-repeater, and logical circuit diode decoders; (3) the possible links between elements are strictly determined. Thus the

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