L 16513-65 EWT(1) IJP(c)/SSD/AFWL
ACCESSION NR: AP5000360 S/0056/64/047/005/1995/1997

AUTHOR: Gol'danskiy, V. I.; Sayasov, Yu. S.

TITLE: Resonant annihilation of positrons in collisions with neutral atoms and with molecules

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 47, no. 5, 1964, 1995-1997

TOPIC TAGS: Annihilation, positron collision, fast annihilation, positron molecule bound state, Dirac annihilation, positron scattering, elastic scattering

ABSTRACT: A quantitative and qualitative interpretation is presented for the anomalous fast annihilation of positrons in polyatomic gases, first reported by D. Paul and L. Saint Pierre (Phys. Rev. Let. v. 11, 493, 1963). The cause for this annihilation is found to be a positron-molecule bound state with a

Card 1/2

L 16513-65
ACCESSION NR: AP500360

binding energy close to 1.0 eV. Since the positron slows down to such an energy within a time much shorter than the Dirac annihilation time, the positron is annihilated by the molecule as a whole in resonant fashion, with a probability much higher than that of the Dirac annihilation. Formulas are presented for the cross section of this annihilation and for the existence of a resonant energy level. It is concluded that to check on this interpretation it would be necessary to observe elastic scattering of slow positrons (~0.1 eV) in those polyatomic gases in which increased annihilation rates are observed. Orig. art. has: 7 formulas.

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

SUBMITTED: 10Jul64 ENCL: 00

SUB CODE: NP NR REF SOV: 001 OTHER: 002

Card 2/2

ACCESSION NR: AP4019971 S/0020/64/154/006/1314/1317

AUTHOR: Ivanov, G. K.; Sayasov, Yu. S.

TITLE: Theory of vibrational excitation of molecules in the momentum approximation

SOURCE: AN SSSR. Doklady*, v. 154, no. 6, 1964, 1314-1317

TOPIC TAGS: vibrational molecular excitation, momentum approximation, collision excitation, excitation temperature dependence, vibrational relaxation, molecular vibrational transition

ABSTRACT: The general theory of scattering in the momentum approximation was developed by the authors in a previous paper (Zh ETF 45, no. 5 (1963)) as a new formulation of the method suggested by G. Chew (Phys. Rev. 80, 196 (1950)). It can be used for the computation of the probabilities of vibrational transitions in molecules which correspond to small frequencies. The subject of the present paper is the reformulation of the method for this purpose. Formulas are derived for the cross sections for the excitation by a collision with an atom.

Card 1/2

ACCESSION NR: AP4019971

The time of the vibrational relaxation is found to have a minimum which, in the case of I_2 + He, is at 210OK. The theory developed for diatomic molecules should be, in principle, applicable to polyatomic molecules. The results are compared with those of other authors. "The authors are grateful to V. N. Kondrat'yev for a discussion."

ASSOCIATION: Institut khimicheskoy fiziki Akademii Nauk SSSR (Institute for Chemical Physics, Academy of Sciences SSSR)

SUBMITTED: 05Sep63 DATE ACQ: 07Feb64 ENCL: 00

SUB CODE: PH NO REF SOV: 002 OTHER: 003

Card 2/2

L 06600-67 EWP(j)/EWT(l)/EWT(m) (A) RM/GD
ACC NR: AT6017649 SOURCE CODE: UR/0000/65/000/000/0298/0306

AUTHOR: Ivanov, G. K.; Sayasov, Yu. S.

ORG: none

TITLE: Possibilities of the method of molecular neutron spectroscopy

SOURCE: AN SSSR. Institut geokhimii i analiticheskoy khimii, Yadernaya khimiya (Nuclear chemistry). Moscow, Izd-vo Nauka, 1965, 298-306

TOPIC TAGS: neutron spectroscopy, neutron cross section, neutron energy distribution, molecular structure, neutron scattering

ABSTRACT: The article discusses in detail several new possibilities of the method of neutron spectroscopy using neutrons with energies of the order of the energies of the chemical bond (E_0 ~1 to 10 electron-volts). These possibilities are based on earlier results obtained by the authors (*ZhETF*, 1961, 40, 513; 1963, 44, 573; 1963, 45, 1456) and are in addition to the possibility of measuring the spectra of energy and angular distributions of scattered neutrons with the required accuracy. The applicability of neutron spectroscopy for investigating the structure and properties of molecules was proposed by V. I. Gol'danskiy (*ZhETF*, 1956, 41, 717). The authors discuss the problem of determining other molecular parameters, such as the force terms, frequencies of oscillation, constants of interaction, diagonal terms, bonds, intramolecular distances,

Card 1/2

L 06600-67
ACC NR: AT6017649

and other factors descriptive of molecular phenomena in such molecules as N_2O, CO_2, NH_3, PH_3, C_2H_6, CH_3OH, and other hydrocarbons. These quantities are determined from knowledge of the cross sections of neutrons colliding with molecules and other pertinent information, such as neutron energies, basic theoretical and experimental relations, etc. It is concluded that various molecular effects, such as ionic bonds, can be profitably studied by extension of the method of neutron spectroscopy. Orig. art. has: 9 formulas.

SUB CODE: 20,07,14/ SUBM DATE: 03Nov65/ ORIG REF: 006/ OTH REF: 004

Card 2/2 mjc

L 59344-65 EWT(1)/EWP(m) Pd-1

ACCESSION NR: AP5015430 UR/0020/65/162/004/0875/0878

14
13
B

AUTHOR: Sayasov, Yu. S.

TITLE: Theory of quenching of ionization processes in gas jets

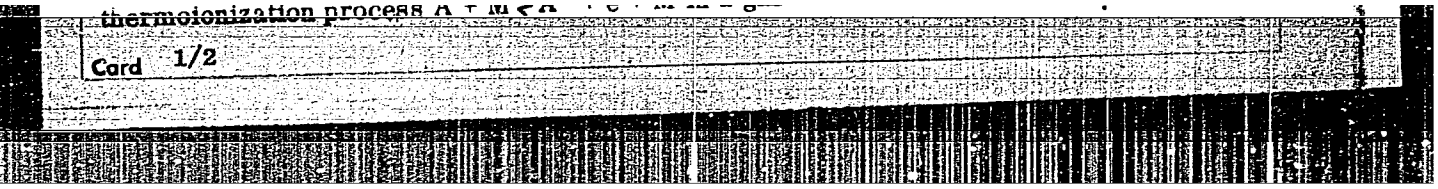
SOURCE: AN SSSR. Doklady, v. 162, no. 4, 1965, 875-878

TOPIC TAGS: gas ionization, dissociated gas, gas jet, ionization quenching

ABSTRACT: In ionization processes, when the relative electron concentration $x = n_e/n$ approaches some constant value x_f, quenching is said to take place. The ionization kinetics for $x \ll 1$ is described by the equation

$$dx/dt = w - \alpha x^2. \qquad (1)$$

Mathematically, the quenching phenomenon signifies that when $t \to \infty$, $x \to x_f = \text{const} > 0$. The course of the ionization curves $x = x(t)$ and the magnitudes of quenched concentra- [illegible] numerical integration of (1). In the present article, a general



L 59344-65

ACCESSION NR: AP5015430

adiabatic exponent γ and flowing in a widening conical nozzle. Calculations of x_t and of the time dependence $x = xt(t)$, carried out by using the general formulas derived, were found [illegible] of the numerical integration obtained by E. T. Smith (VII Symposium

described by equation (1). Orig. art. has: 11 formulas.

ASSOCIATION: Institut khimicheskoy fiziki Akademii nauk SSSR (Institute of Chemical Physics, Academy of Sciences, SSSR)

SUBMITTED: 06Nov64 ENCL: 00 SUB CODE: GC

NO REF SOV: 002 OTHER: 004

Card 2/2 dlp

DALIDCHIK, F.I.; SAYASOV, Yu.S.

Electron recombination in molecular gases. Zhur.eksp.i teor.fiz. 49 no.1:302-305 Jl '65. (MIRA 18:8)

1. Institut khimicheskoy fiziki AN SSSR.

IVANOV, G.K.; SAYASOV, Yu.S.

Resonance interaction between neutrons and molecules. Atom. energ. 19 no.2:183-184 Ag '65. (MIRA 18:9)

L 10311-66 EWT(m) DIAAP

ACC NR: AP5026404 SOURCE CODE: UR/0386/65/002/006/0266/0269

AUTHOR: Dalidchik, F. I.; Savasov, Yu. S. 18 B

ORG: Institute of Chemical Physics, Academy of Sciences SSSR (Institut khimicheskoy fiziki Akademii nauk SSSR)

TITLE: Exchange effect in elastic scattering of polarized identical nuclei 19

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki. Pis'ma v redaktsiyu. Prilozheniye, v. 2, no. 6, 1965, 266-269

TOPIC TAGS: elastic scattering, proton polarization, Coulomb interaction

ABSTRACT: In view of the increasing importance of experiments on the polarization of the products of direct nuclear reactions, for the purpose of explaining their concrete mechanism of determining the spectroscopic characteristics of the nuclei, the authors analyze theoretically the elastic scattering of Coulomb-interacting polarized identical particles. It is shown that when a completely polarized beam is scattered by a completely polarized target interference takes place only when the polarizations of the beam and the target coincide. This is the quantum analog of a fact well known in optics, that there is no interference between two light rays which are polarized in mutually perpendicular planes. In the general case it follows from the analysis that the intensity of the oscillations of the exchange term depends essentially on the degree of polarization of the beam and of the target, as illustrated in Fig. 1 for the case of particles with spin I = 1. This can serve as a basis for a new method of detecting polarization of slow charged particles. Since the procedure for ob-

Card 1/2

2

L 10311-66

ACC NR: AP5026404

taining polarized targets is being continuously perfected and there are now already twenty different methods for accomplishing this, the proposed method can find application in a large group of experiments, including measurement of polarization of slow protons and of nuclei of light and medium elements, which is of particular importance in connection with the ever increasing use of multiply-charged ions in nuclear physics. Orig. art. has: 1 figure and 4 formulas.

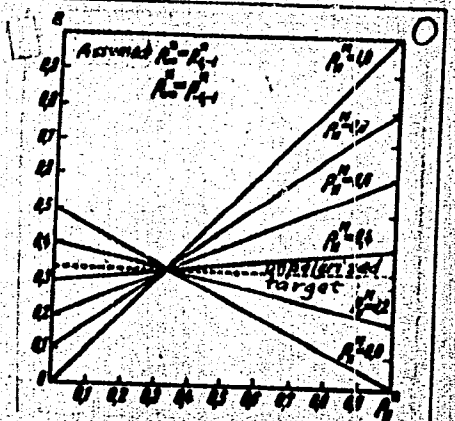


Fig. 1. Oscillation intensity vs. target polarization for particles with spin I = 1.

SC: /8/ SUBM DATE: 19Jul65/ ORIG REF: 002/ OTH REF: 001

Card 2/2

L 5443-66 EWT(l)/EWT(m)/EPF(c)/EPA(w)-2/EWP(j)/T/EWA(m)-2/ETC(m) IJP(c)
ACCESSION NR: AP5019245 WW/AT/RM UR/0056/65/049/001/0302/0305

AUTHOR: Dalidchik, F. I.; Sayasov, Yu. S. 44,55

TITLE: Recombination of electrons in molecular gases 1

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 49, no. 1, 1965, 302-305

TOPIC TAGS: electron recombination, molecular interaction, diatomic molecule, excited state, electron collision, collision

ABSTRACT: The authors calculate the electron and ion recombination coefficients in a weakly ionized gas of diatomic or linear homopolar molecules, when account must be taken of both elastic and inelastic collisions. It is assumed that the equilibrium of the electron coordinates is established essentially as a result of elastic collisions of the electrons with the molecules, and that the diffusion of the electrons in energy space is determined in the general case by both types of collisions. The calculation scheme is the same as developed by L. P. Pitayevskiy (ZhETF v. 42, 1326, 1962), and account is taken of losses of electron energy in rotational excitation of the molecules. At sufficiently high temperatures the results agree with those of Pitayevskiy. "We thank L. P. Pitayevskiy for help and A. S. Kompaneyets, G. K. Ivanov, and Ye. Ye. Nikitin for a discussion of the re-

44,55 44,55 44,55 44,55

Card 1/2

090/0820

L 5443-66

ACCESSION NR: AP5019245

sults." Orig. art. has: 14 formulas.

ASSOCIATION: Institut khimicheskoy fiziki Akademii nauk SSSR (Institute of Chemical Physics, Academy of Sciences, SSSR)

SUBMITTED: 24Feb65 ENCL: 00 SUB CODE: NP

NR REF SOV: 001 OTHER: 004

Card 2/2

L 14680-66 EWT(m)/EPF(n)-2/EWA(h) DM
ACC NR: AP6008258 SOURCE CODE: UR/0089/65/019/002/0183/0184

AUTHOR: Ivanov, G. K.; Sayasov, Yu. S.

ORG: none

33
B

TITLE: Resonance neutron-molecule interactions 19,55,44

SOURCE: Atomnaya energiya, v. 19, no. 2, 1965, 183-184

TOPIC TAGS: nuclear resonance, neutron scattering, neutron absorption, neutron interaction, gas, molecule, chloride

ABSTRACT: Cross sections of neutron resonance scattering and absorption by nuclei in molecules were estimated considering that the molecules are free. The obtained formulas hold for molecular gases. However, they also can be used for molecular liquids and crystals, in the case, in which the molecular interactions described by delayed rotation frequencies are smaller in comparison to the molecular oscillation frequencies. Ordinarily such conditions are observed in heavy molecules. The energy dependence of the total cross section was computed for chloride molecules with resonance parameters $\Gamma \approx 0.8$ ev and $E_0 \approx 4300$ ev (Γ is the resonance level width and E_0 is the resonance energy). Orig. art. has: 9 formulas. [NA]

SUB CODE: 20 / SUBM DATE: 26Oct64 / ORIG REF: 005 / OTH REF: 001

Card 1/1 BC

UDC: 539.172.4

2

L 23735-66 EWT(1) IJP(c) AT

ACC NR: AP6006800 SOURCE CODE: UR/0386/66/003/001/0040/0044

AUTHORS: Ivanov, G. K.; Sayasov, Yu. S. SP B

ORG: Institute of Chemical Physics, Academy of Sciences, SSSR (Institut khimicheskoy fiziki Akademii nauk SSSR)

TITLE: Direct atomic-molecular or ionic-molecular reactions

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki. Pis'ma v redaktsiyu. Prilozheniye, v. 3, no. 1, 1966, 40-44

TOPIC TAGS: ion interaction, molecular interaction, particle interaction, differential cross section, argon, hydrogen, deuterium

ABSTRACT: The authors point out that several recent experiments by various investigators on ion-molecular reactions of the type A + BC → AB + C(A = atom or ion, BC = diatomic molecule or ion) cannot be interpreted on the basis of theories involving the use of the intermediate-state concept, since the relative-motion energy in these experiments was close to 10 eV, at which such theories are not valid. They therefore present the results of theoretical calculations using

Card 1/2

L 23735-66

ACC NR: AP6006800

the model of direct interactions between the incident particles A and the bound particles B and C, without formation of an intermediate state. Results of an earlier paper by the authors (ZhETF v. 45, 1456, 1963) are used to calculate the differential cross section for the production of a bound state AB with given energy and emission of a particle C into a given solid angle, on the assumption that the interaction potential is additive in the reference system of the particles, and the effective time of the paired interaction between particle A and particle B or C is small compared with the period of the molecular oscillations. The final formulas obtained for the cross section are compared with the results of experimental data on the reactions $Ar^+ + H_2 \rightarrow ArH^+ + H$ and $Ar^4 + D_2 \rightarrow ArD^+ + D$, $Ar + HD^+ \rightarrow ArH^+ + D$, and other reactions between argon atoms and hydrogen or deuterium ions and argon ions and hydrogen and deuterium atoms and are found to be in reasonable agreement. Orig. art. has: 1 figure and 4 formulas.

SUB CODE: 20/ SUBM DATE: 16Nov65/ ORIG REF: 002/ OTH REF: 006

Card 2/2 *UW*

ACC NR: AP7001178 SOURCE CODE: UR/0166/66/000/005/0048/0053

AUTHORS: Arifov, P. U.; Gol'danskiy, V. I.; Sayasov, Yu. S.

ORG: Physicotechnical Institute, AN UzSSR (Fiziko-tekhnicheskiy institut AN UzSSR); Institute of Chemical Physics, AN SSSR (Institut khimicheskoy fiziki AN SSSR)

TITLE: Deceleration spectrum of light particles in heavy gas, with a consideration of the capture process

SOURCE: AN UzSSR. Izvestiya. Seriya fiziko-matematicheskikh nauk, no. 5, 1966, 48-53

TOPIC TAGS: kinetic theory, kinetic equation, inelastic interaction, heavy particle, light particle, PARTICLE DISTRIBUTION, ATOM, POSITIVE ION, ELECTRIC FIELD

ABSTRACT: A general study is made of the slowing-down process of electrons and positrons in a stationary cloud of atoms and positive ions. Starting from Massey and Burhops (G. Messi and Ye. Barkhop. Elektronnyye i ionnyye stolknoveniya, IL, 1958, gl. 1, 5; gl. 3, 4), two kinetic equations that describe the drift of light particles in a heavy gas under the action of electric fields, the following second order differential equation is obtained

$$-\frac{eF}{3m}\frac{d}{d\varepsilon}\left(\varepsilon\frac{eF}{NQ_{tc}}\frac{df_0}{d\varepsilon}\right)+\frac{\varepsilon}{m}NQ_{in}f_0=\frac{2}{M}\frac{d}{d\varepsilon}(\varepsilon^2NQ_df_0)+\frac{R(v)}{2v},$$

where R is a source term, Q_d is a momentum transfer cross section, and $Q_{sc} = Q_{in}$(decay

Card 1/2

ACC NR: AP7001178

cross section) + Q_d. In the absence of an electric field the stationary distribution for the light particles can be obtained readily. For no electric fields this is given by

$$f = f_0 = \frac{M}{m}\frac{jm^3}{16\pi NQ_d \cdot \varepsilon^2} = \frac{M}{m}\frac{j}{4\pi NQ_d \cdot v^4}$$

for zero loss processes, and by

$$f = f_0 = \frac{M}{m}\frac{jm^3}{16\pi NQ_d \cdot \varepsilon^2}\, e^{-\frac{M}{2m}\int_{\varepsilon}^{E_{rp}} \frac{Q_{in}}{Q_d}\frac{d\varepsilon}{\varepsilon}}$$

if loss processes are included. The problem becomes more complicated in the presence of an electric field. For a weak electric field one can calculate a first order correction to the stationary solution, corresponding to elastic-inelastic momentum transfer processes. This yields

$$f_0 = e^{-6\frac{m}{M}\int_0^{\varepsilon}\frac{\varepsilon d\varepsilon}{\varepsilon_d^2}}\left[B + \frac{3m^2}{2eF}\int_0^{\varepsilon}\left(j/4\pi + C_0 - \int_v^{v_{rp}} NQ_{in}\cdot v^3 \cdot f_0^{(11)}\, dv\right)\frac{d\varepsilon}{\varepsilon_d \cdot \varepsilon}\cdot e^{6\frac{m}{M}\int_0^{\varepsilon}\frac{\varepsilon d\varepsilon}{\varepsilon_d^2}}\right].$$

Some numerical results are given in tabular form to compare the various distribution functions derived above. Orig. art. has: 13 equations and 1 table.

SUB CODE: 20/ SUBM DATE: 27May66/ ORIG REF: 001/ OTH REF: 010

Card 2/2

ACC NR: AP6035124 SOURCE CODE: UR/0053/66/090/001/0047/0084

AUTHOR: Ivanov, G. K.; Sayasov, Yu. S.

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

TITLE: Interaction of neutrons with molecules

SOURCE: Uspekhi fizicheskikh nauk, v. 90, no. 1, 1966, 47-84

TOPIC TAGS: neutron interaction, molecular interaction, molecular structure, fast neutron, neutron spectrum, neutron scattering, scattering amplitude

ABSTRACT: This is a review article devoted essentially to a systematic development of the theory of scattering of fast neutrons by molecules, with special application to the determination of the properties and structure of molecules by means of the fast-neutron spectra. It is based essentially on earlier papers by the authors (Atomnaya energiya v. 19, 183, 1965 and preceding papers). The exposition is limited to the study of spectra of neutron scattering by molecules, and does not include phenomena of chemical transformations under the influence of neutrons. The survey also presents the theory of scattering of slow neutrons by molecules. Since the scattering amplitudes of fast neutrons depend strongly on the energy and exhibit resonances, the theory is presented from the very outset for the general case of variable amplitudes for neutron-nucleus scattering, using the formalism of the impulse approximation, which is itself described in some detail. A classification of the processes of scattering of neutrons by chemically bound nuclei, as a function of the character of the neutron-

 UDC: 539.121.7 - 539.125.5

ACC NR: AP6035124

nucleus interaction and of the neutron energy, is presented. The section headings are: I. The impulse approximation method as applied to the scattering of neutrons by chemically bound nuclei (1. Cross sections for molecular transitions under the influence of neutrons in the impulse approximation. 2. Presentation of the cross sections for scattering and absorption of neutrons as averages over the initial state of the molecules). II. Scattering of slow neutrons (3. General formulas for slow neutron scattering cross sections with classical treatment of rotational transitions of the molecule. 4. Scattering of neutrons with energies less than the energy for excitation of molecular vibrations. 5. Scattering of neutrons accompanied by vibrational excitation of the molecule). III. Scattering of fast neutrons (6. Approximation by free particles with a momentum spread. 7. The case of potential neutron-nucleus scattering. 8. Case of variable neutron-nucleus scattering amplitudes). Orig. art. has: 7 figures, 93 formulas, and 1 table.

SUB CODE: 20/ SUBM DATE: 00/ ORIG REF: 027/ OTH REF: 049

Card 2/2

ZHUMATOV, Kh.Zh.; SAYATOV, M.Kh.

Chromatography of influenza viruses A and A2 with anti-influenza serum and a biologically neutral complex of virus-antibody with Sephadex G-200. Vop. virus. 9 no.5:555-559 S-O '64.
(MIRA 18:6)

1. Institut mikrobiologii i virusologii AN Kazakhskoy SSR, Alma-Ata.

ZHUMATOV, Kh.Zh.; SAYATOV, M.Kh.; ISAYEVA, Ye.S.

Studying the infective activity of RNA of the type A influenza virus in susceptible animals. Vest. AN Kazakh.SSR 21 no.2:54-58 F '65. (MIRA 18:3)

SAYATOV, M.Kh.; ZHUMATOV, Kh.Zh.

Reactivation of influenza virus from neutral complex with immune serums. Izv. AN Kazakh. SSR. Ser. biol. nauk 3 no.3: 47-53 My-Je '65. (MIRA 18:9)

SAYATOV, M.Kh.; ZHUMATOV, Kh.Zh.

Separating the virus-antibody complex by filtration through a sephadex gel. Vest. AN Kazakh. SSR 21 no.10:82-84 O '65.
(MIRA 18:12)

L 39516-66 EWT(1)/T GD/JK

ACC NR: AP6014663 SOURCE CODE: UR/0031/65/000/002/0054/0058

AUTHOR: Zhumatov, Kh. Zh.; Sayatov, M. Kh.; Isayeva, Ye. S.

ORG: none

TITLE: Investigations of the infectious activity of RNA of influenza A virus in susceptible animals

SOURCE: AN KazSSR. Vestnik, no. 2, 1965, 54-58

TOPIC TAGS: virology, virus disease, RNA, mouse, antigen

ABSTRACT: Intranasal injection of RNA of influenza A virus (Pr-8 strain) diluted 1:8 in 0.15 M NaCl in 0.007 M phosphate buffer causes influenza which kills white mice in the first passage. Undiluted RNA generally does not have this effect. When RNA solution is injected into white mice and chick embryos, virus is reproduced with the antigenic properties characteristic of the original virus. Mouse strains of influenza virus resynthesized from RNA had a lower hemagglutination and infection titer than did a strain obtained from RNA after inoculation of chick embryos. Orig. art. has: 3 tables. [JPRS]

SUB CODE: 06 / SUBM DATE: none / ORIG REF: 010 / OTH REF: 007

Card 1/1 vmb

SAYBEKOV, A.Sh.

Actinomyces antagonistic to Rhizoctonia aderholdii. Trudy Inst. mikrobiol. i virus. AN Kazakh. SSR 3:162-165 '59.
(MIRA 13:2)
(ACTINOMYCES) (KAZAKHSTAN--SUGAR BEETS--DISEASES AND PESTS)
(FUNGI, PHYTOPATHOGENIC)

SAYBEKOV, A. Sh.

Biological control of fungi causing root rot of sugar beets. Nauch. dokl. vys. shkoly; biol. nauki no.3:179-183 '60.
(MIRA 13:8)

1. Rekomendovana kafedroy biologii pochv Moskovskogo gosudarstvennogo universiteta im. M.V. Lomonosova.
(Actinomyces) (Kazakhstan--Sugar beets--Diseases and pests)
(Bacterial antagonism)

SAYBEL', A. G.

"On the Theory of Frequency-Type Radio Altimeters," pp 5-24, ill, 6 ref

Abst: The author examines the theory of frequency radio altimeters and considers the peculiarities of their operation for the measurement of low altitudes. In addition, an analysis is made of the relationship between radio altimeter errors and various factors and the effect of parasitic amplitude modulation on the operation of the altimeter.

SOURCE: Trudy MAI im. S. Ordzhonikidze MVO SSSR (Works of the Moscow Aviation Institute imeni S. Ordzhonikidze of the Ministry of Higher Education USSR), No 83, Some Problems of Superhigh-Frequency and Pulse Technology, Moscow, Oborongiz, 1957

Sum 1854

SAYBEL, A.G.

108-5-9/13

AUTHOR SAYBEL' A.G., Ordinary Member of Radio Society.

TITLE On the Problem of the Degree of Accuracy of Position Finding in Radionavigation.
(K voprosu o kharakteristike tochnosti mestoopredeleniya v radionavigatsii.- Russian)

PERIODICAL Radiotekhnika 1957, Vol 12, Nr 5, pp 62-66 (U.S.S.R.)

ABSTRACT First the distribution function of the position-error-possibility is investigated for a case where the position lines cross one another at angle γ . The equation for the scattering (mean quadratic error) σ_r, which contains the correlation coefficient ϱ is deduced. The dispersion function of the position-error-probability is then deduced. This function expresses the dependence of the finding probability of the position found within a range of a circumference with the radius r_o. The scattering density of the error-possibility of position r is determined. The diagrams obtained show the dependence of the scattering function of the position-error-possibility upon the relation r_o/σ_r. These diagrams are also apply to the general case where $\gamma \neq \frac{\pi}{2}$ and $\varrho \neq 0$.

CARD 1/3

On the Problem of the Degree of Accuracy of Position Finding in Radionavigation.

Contrary to above, where

$$m = \frac{\sigma_y}{\sigma_x} \leq 1 \quad (\sigma_r = \sqrt{\sigma_x^2 + \sigma_y^2}),$$

we have here to understand m as the relation of the small error-ellipse-semiaxis to the great semiaxis. Then the different degrees of accuracy of position finding are compared with one another. The distribution function of the position-error-possibility P changes with m, this change it is, however, not great in the case of $P > 0,6$.
The probability that the position error is greater than σ_r or $2\sigma_r$, is within the range of 0,63 + 0,68 or 0,95 + 0,98.
From the diagrams we see that the probability of finding the object position within the range of a circumference with the radius $r_2 = a$ is by far greater in the case of elliptic scattering than in the case of circular scattering. The probability of finding an object position within the range of a circumference with $r_3 = \sqrt{ab}$ is by far smaller in the case of an elliptic scattering than in the case of a circular scattering. It

108-5-9/13

On the Problem of the Degree of Accuracy of Position Finding in Radionavigation.

is, therefore, useful to characterize the accuracy of position finding by the quantity of position scattering (mean quadratic error).
(With 4 illustrations and 5 Slavic references)

ASSOCIATION: not given.
PRESENTED BY: -
SUBMITTED: 8.9. 1956
AVAILABLE: Library of Congress.

CARD 3/3

20(3) PHASE I BOOK EXPLOITATION SOV/2503

Saybel', Anatoliy Geogriyevich

Osnovy teorii tochnosti radiotekhnicheskikh metodov mestoopredeleniya; uchebnoye posobiye (Foundations of Theory of Accuracy in Methods of Determining a Position by Radar; a Manual) Moscow, Oborongiz, 1958. 52 p. (Series: Moscow. Aviatsionnyy institut imeni Sergo Ordzhonikizde) 13,500 copies printed.

Ed.: V.M. Tokar', Engineer; Ed. of Publishing House: S.D. Khametova; Tech. Ed.: I. M. Zudakin; Managing Ed.: A. S. Zaymovskaya.

PURPOSE: This manual is intended for students of institutions of higher learning and aspirants studying radar, radionavigation, and radioengineering systems.

COVERAGE: The manual considers radioengineering methods used in radar and radionavigation for determining the position of an object and describes the bases of a theory of errors in the various methods of position determination. The theory of errors is presented on the basis of fundamental principles of scalar field

Card 1/ 3

theory and probability theory. The author thanks Professor I. S. Dzhigit; V. M. Bovsheverov, V. A. Veytsel', and P. A. Bakulev, Candidates of Technical Sciences; and Aspirant A. A. Sosnovskiy for their advice. There are 5 references: 4 Soviet and 1 English.

TABLE OF CONTENTS:

AVAILABLE: Library of Congress

Card 3/3

IS/fal
11-23-59

20(3) SOV/112-59-3-6039

Translation from: Referativnyy zhurnal. Elektrotekhnika, 1959, Nr 3, p 258 (USSR)

AUTHOR: Saybel', A. G.

TITLE: Accuracy Characteristic of Position Finding by Radar
(O kharakteristike tochnosti mestoopredeleniya v radiolokatsii)

PERIODICAL: Izv. vyssh. uchebn. zavedeniy. Radiotekhnika, 1958, Nr 2, pp 214-221

ABSTRACT: Accuracy of position finding by radar can be characterized by an ellipse or ellipsoid of specified-probability errors, or by the root-mean-square position error. A relationship is presented between the size of ellipse or ellipsoid of specified-probability errors and the values of root-mean-square errors in the measured coordinates; position-error distribution functions are examined for the cases of circular, elliptical, and spherical dispersions. It is assumed that random errors of the measured coordinates have normal distribution. Formulae are presented that permit plotting an error field which

Card 1/2

Accuracy Characteristic of Position Finding by Radar

actually is a number of ellipses of specified-probability errors. The position-finding accuracy, within the radar range, can also be characterized by the accuracy zones; each zone represents a space limited by the contour of constant position-finding accuracy.

V.I.R.

SAYBEL', A.G.; NIKITIN, Ye.P.

Properties of radio pulse range finders equipped with one integrator. Izv. vys. ucheb. zav.; radiotekh. no.3:348-355 My-Je '58. (MIRA 11:7)

1.Rekokendovana kafedroy Moskovskogo ordena Lenina aviatsionnogo instituta im. Sergo Ordzhonikidze.
(Radar)

SAYBEL' A.G.

BRASLAVSKIY, D.A., kand.tekhn.nauk; GOL'DFARB, L.S., doktor tekhn.nauk; GUZENKO, A.I., kand.tekhn.nauk; DMITRIYEV, K.Ye., kand.tekhn.nauk; KALASHNIKOV, V.A., inzh.; KLOBUKOV, P.P., kand.tekhn.nauk; KLUBNIKIN, P.F., kand.tekhn.nauk; KRASSOV, I.M., kand.tekhn.nauk; PEL'POR, D.S., doktor tekhn.nauk; PETROV, V.V., kand.tekhn.nauk; ROZENBLAT, M.A., doktor tekhn.nauk; RUZSKIY, Yu.Ye., kand.tekhn. nauk; SADOVSKIY, B.D., kand.tekhn.nauk; SOKOLOV, A.A., kand.tekhn. nauk; TITOV, V.K., kand.tekhn.nauk; ULANOV, G.M., kand.tekhn.nauk; FILIPCHUK, Ye.V., kand.tekhn.nauk; KHARYBIN, A.Ye., kand.tekhn. nauk; KHOKHLOV, V.A., kand.tekhn.nauk; GALTEYEV, F.F., kand.tekhn. nauk, retsenzent; KARASEV, V.A., doktor tekhn.nauk, retsenzent; RAGOZIN, Yu.D., kand.tekhn.nauk, retsenzent; REYNGOL'D, Yu.R., inzh., retsenzent; RYABOV, B.A., doktor tekhn.nauk, retsenzent; SAYBEL', A.G., kand.tekhn.nauk, retsenzent; SHEVYAKOV, A.A., kand.tekhn.nauk, retsenzent; SOLODOVNIKOV, V.V., prof., doktor tekhn.nauk, red.; VITENBERG, I.M., kand.tekhn.nauk, nauchnyy red.; MOLDAVER, A.I., kand.tekhn.nauk, nauchnyy red.; POLYAKOV, G.F., red.izd-va; AKIMOVA, A.G., red.izd-va; KONOVALOV, G.M., red.izd-va; TIKHONOV, A.Ya., tekhn. red.; SOKOLOVA, T.F., tekhn.red.

[Fundamentals of automatic control] Osnovy avtomaticheskogo regulirovaniia. Vol.2. [Elements of automatic conrol systems] Elementy sistem avtomaticheskogo regulirovaniia. Pt.1. [Sensing devices, amplifiers, and actuators] Chuvstvitel'nye, usilitel'nye i ispolnitel'nye elementy. Moskva, Gos.nauchno-tekhn.izd-vo mashinoatroit.lit-ry. 1959. 722 p.
(Automatic control) (MIRA 12:4)
(Electronic apparatus and appliances) (Electronic calculating machines)

PHASE I BOOK EXPLOITATION SOV/4131

Saybel', Anatoliy Georgiyevich

Osnovy radiodal'nometrii; uchebnoye posobiye (Fundamentals of Radio Range Finding; Textbook). Moscow, Oborongiz, 1960. 114 p. 9,500 copies printed.

Sponsoring Agencies: Moskovskiy aviatsionnyy institut imeni Sergo Ordzhonikidze; Ministerstvo vysshego obrazovaniya SSSR.

Ed.: V. M. Tokar'; Tech. Ed.: V. I. Oreshkina; Managing Ed.: A. S. Zaymovskaya, Engineer.

PURPOSE: This textbook is for students of schools of higher education studying radar, radionavigation, and radio engineering systems. It may also be used by general technicians who wish to improve their knowledge of the field of radio range finding.

COVERAGE: The book contains basic relationships for phase, frequency, and pulse radio range finders. Systems of automatic range tracking having one or two integrators are studied. No personalities are mentioned. There are 19 references: 14 Soviet (5 of which are translations) and

Card 1/3

5 English.

TABLE OF CONTENTS:

Fundamentals of Radio (Cont.)

AVAILABLE: Library of Congress

JP/rlm/ec
8-25-60

Card 3/3

G.4700

73142
SOV/108-15-3-5/17

AUTHORS: Nikitin, Ye. P., Saybel', A. G.

TITLE: Dynamic Properties of Impulse Automatic Radio-Range Finders With Two Integrators

PERIODICAL: Radiotekhnika, 1960, Vol 15, Nr 3, pp 25-30 (USSR)

ABSTRACT: In this paper the automatic radio-range finder with two integrators is considered as an impulse automatic control system. Impulse radio-range finders are used for radiolocation and radionavigation purposes. The equivalent block diagram of the time discriminator and of the control block with two integrators is shown in Fig. 1.

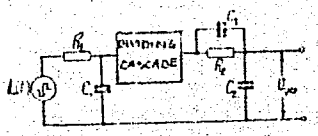


Fig. 1.

Card 1/4

Here, R_1, C_1 and R_2, C_2 are first and second integrator, respectively; C_3 is stabilizing element. The dividing cascade eliminates the second integrator's effect on the first one, and causes an increase in the sensitivity of the control block. The equations of the dynamic state of the system are derived under the following assumptions: (1) The output signal of the time discriminator consists of two combined current impulses of rectangular shape and equal amplitudes; (2) the gain K_y of the dividing amplifier does not depend on frequency. The set of initial equations is given in the form:

$$U_2[n+1] = U_2[n] + K_y K_c \Delta U_1[n] \delta + (K_y U_1[n+1] - U_2[n])(1-\delta), \quad (1)$$

$$K_c = \frac{C_3}{C_2 + C_3}; \quad \delta = e^{-\beta}; \quad \beta = \frac{T_n}{R_2(C_2 + C_3)}.$$

Card 2/4

similarly

$$U_2[n+2] = U_2[n+1] + K_y K_c \Delta U_1[n+1]\delta + (K_y U_1[n+2] - U_2[n+1])(1-\delta). \quad (2)$$

Eliminating from Eqs. 1 and 2 the quantity U_1 and taking into account that:

$$t_M[n] = K_M U_2[n]; \ \Delta U_1[n] = K_u(t_R[n] - t_M[n]).$$

The following resultant equation is obtained:

$$t_M[n+2] - [1+\delta - K_1(1-\delta) - K_2\delta]\, t_M[n+1] + \delta(1-K_2)\, t_M[n] = [K_2\delta + K_1(1-\delta)]\, t_R[n+1] - K_2\delta\, t_R[n]. \quad (3)$$

HERE

$$K_1 = K_u K_M K_y; \ K_2 = K_u K_M K_y K_C.$$

where $K_u = 21/C_1$; K_u and K_M are transfer coefficients of the first integrator and the time modulator,

Card 3/4

respectively; t_M is time delay of selective impulses; t_R is time of the signal spreading. The various types of transient states of the system are investigated as functions of values of roots of the characteristic equation corresponding to the differential equation (3). Character of the transient states and time of their duration are determined. Operation of the servosystem when tracking a target moving with constant velocity is briefly outlined. It is shown that the "memory" with respect to velocity is longer when the time constant of the second integrator increases. There are 6 figures; and 5 Soviet references.

SUBMITTED: April 7, 1959

BELOTSERKOVSKIY, Grigoriy Bentsionovich; SAYBEL', A.G., kand. tekhn.nauk, dotsent, retsenzent; SALGANIK, P.O., kand. tekhn. nauk, red.; BOGOMOLOVA, M.F., red. izd-va; PUKHLIKOVA, P.A., tekhn. red.

[Radar apparatus] Radiolokatsionnye ustroistva. Moskva, Gos. nauchno-tekhn. izd-vo Oborongiz, 1961. 431 p. (MIRA 14:6)
(Radar)

PHASE I BOOK EXPLOITATION SOV/5667

Saybel', A. G.

Osnovy radiolokatsii (Principles of Radar) Moscow, Izd-vo "Sovetskoye radio," 1961. 384 p. Errata slip inserted. 25,000 copies printed.

Eds.: P. A. Bakulev and V. G. Masharova; Tech. Ed.: A. A. Sveshnikov.

PURPOSE: This textbook has been approved by the Ministry of Higher and Secondary Specialized Education RSFSR for the course "Principles of Radar" in radio engineering departments of technical schools of higher education.

COVERAGE: Special attention is given to radar systems and the development of a relationship between tactical and technical parameters of radar equipment. The following topics are discussed: general information on radar; reflecting properties of radar targets; radio distance-measuring and direction-finding systems; detection of radar signals; factors determining radar range and the accuracy of fixing target position; translation of radar information; and radar countermeasures. The description of statistical

Card 1/ 2

analysis of the relationship between tactical and technical parameters of radar is more thorough than that in existing textbooks. According to the Foreword, this is the first attempt to present the methods and an analysis of the accuracy of position fixing, and also an analysis of the dynamic properties of automatic range-measuring equipment used as pulse tracking systems. The author thanks the following persons: A. F. Bogomolov, Professor, Doctor of Technical Sciences; A. Ye. Basharinov, Professor, Doctor of Technical Sciences; B. F. Vysotskiy, Doctor of Technical Sciences; I. S. Dzhigit, Professor; P. A. Bakulev, Docent, Candidate of Technical Sciences; and A. A. Sosnovskiy, Engineer. There are 27 references, all Soviet.

TABLE OF CONTENTS:

CHERNYAK, A.; BESEDIN, I.; SAYBEL', V., traktorist

Put machinery in reliable hands. Sov. profsoiuzy 18 no.8:9-11 '62. (MIRA 15:4)

1. Predsedatel' TSelinogradskogo rayonnogo komiteta professional'nogo soyuza rabochikh i sluzhashchikh sel'skogo khozyaystva i zagotovok (for Chernyak). 2. Predsedatel' rabochego komiteta sovkhoza "Bozaygirskiy" (for Besedin).
(Virgin Territory--Agricultural machinery--Repairing)
(Virgin Territory--Trade unions)

SAYEEY, M.

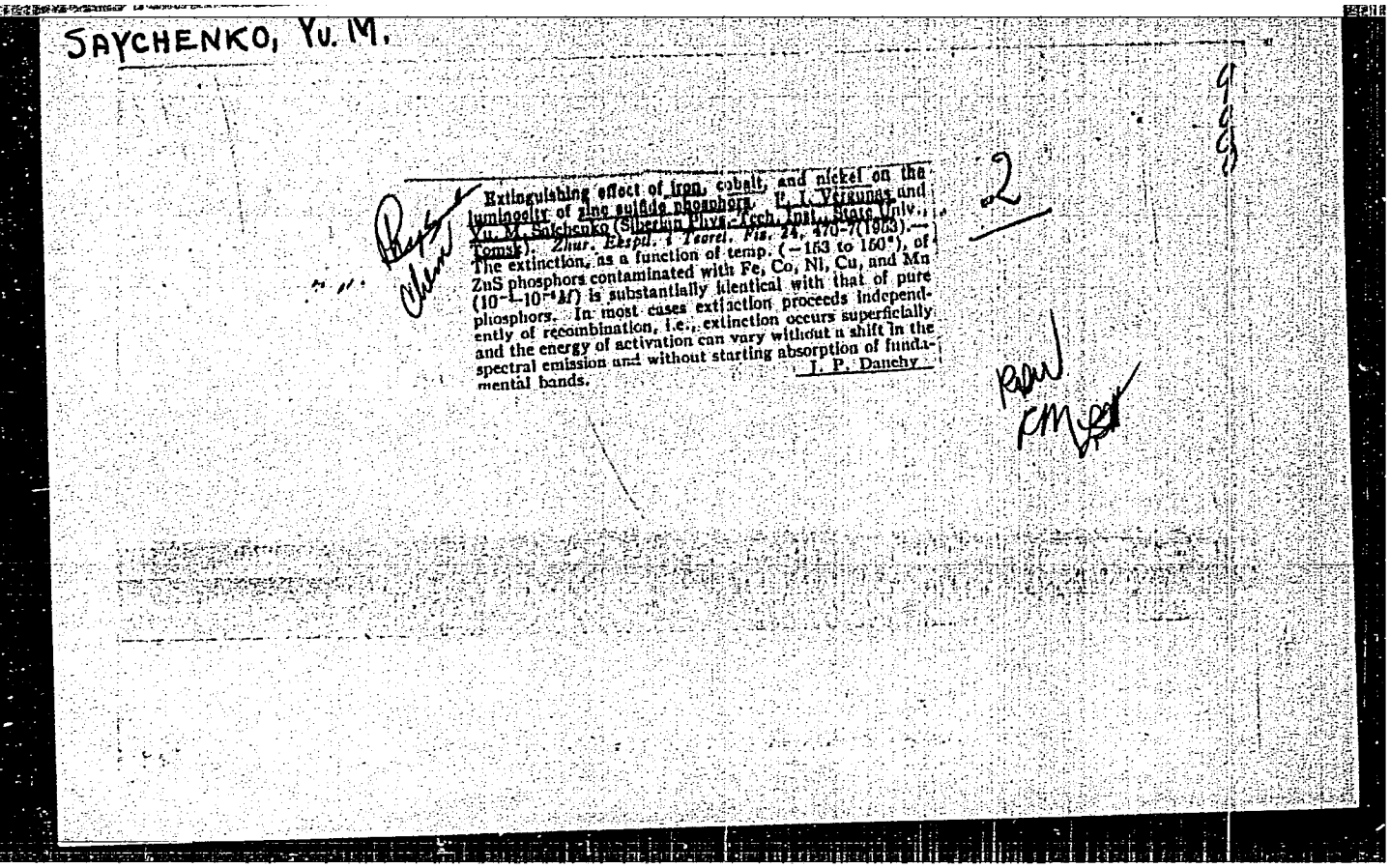
Providing the Hungarian Cotton Industry with Spare Parts. Leka Promishlenost (Light Industry), #12:35:Dec. 1955

SAYCHENKO, V.V., inzh.-mekhanik

Controlling windrowers with the help of tractor hydraulic systems. Mekh. sil'. hosp. 11 no.6:9-10 Je '60. (MIRA 13:11)
(Harvesting machinery)

SAYCHENKO, V.V., inzh.-mekhanik

Grain combines in "second harvesting." Mekh. sil'. hosp. 14 no.8: 12-13 Ag '63. (MIRA 17:1)



SAYCHENKO, Yu. M.

Extinguishing effect of iron, cobalt, and nickel on the luminescence of zinc sulfide phosphors. V. I. Vitiunas and Yu. M. Saichenko (Siberian Phys.-Tech. Inst., State Univ., Tomsk). *Zhur. Eksptl. i Teoret. Fiz.* 24, 470-7(1953).—The extinction, as a function of temp. (−163 to 160°), of ZnS phosphors contaminated with Fe, Co, Ni, Cu, and Mn (10^{-4}–10^{-2} *M*) is substantially identical with that of pure phosphors. In most cases extinction proceeds independently of recombination, i.e., extinction occurs superficially and the energy of activation can vary without a shift in the spectral emission and without starting absorption of fundamental bands. I. P. Danchy

SOV/58-59-4-8765

Translation from: Referativnyy Zhurnal Fizika, 1959, Nr 4, p 198 (USSR)

AUTHOR: Saychenko, Yu.M.

TITLE: Experimental Application of a Photomultiplier to the Study of the Luminescent Properties of Phosphors

PERIODICAL: Uch. zap. Kazakhsk. un-ta, 1957, Vol 30, pp 45 - 47

ABSTRACT: The author describes experiments involving the use of a photoelectronic multiplier with a reflecting galvanometer for the purpose of plotting the rise and decay curves of ZnSCu and ZnSCuCo photoluminophors illuminated by a PRK-2 mercury lamp. The decay took the form of a hyperbolic dependence with an exponent close to unity.

N.V. Vasil'chenko

Card 1/1

32-24-6-30/44

AUTHORS: Saychenko, Yu.M., Ivanov, K.M.

TITLE: News in Brief (Korotkiye soobshcheniya)

PERIODICAL: Zavodskaya Laboratoriya, 1958, Vol 24, Nr 6, pp. 757-758 (USSR)

ABSTRACT: Yu.M.Saychenko of Kazakh State University imeni S.M. Kirov (Kazakhskiy gosudarstvennyy universitet im. S.M.Kirova) in cooperation with G.S. Maksimova worked out a method for the reduction of the time of exposure in luminescence spectrograms used for sorting glass. A graph shows, among other things, that a quartz lamp serves as a light source and that light passes through the sample into a "horn" where it is absorbed. A comparison of the luminescence spectra of various types of glass is said to have shown that a decrease of the intensity of the luminescence spectrum takes place with an increase of the iron content in the samples. K.M. Ivanov of the All-Union Scientific Institute of Coal Research (Vsesoyuznyy nauchno-issledovatel'skiy ugol'nyy institut) worked out a spectral method making it possible to determine zinc in electrolyte solutions of up to 0.005%. A spectrograph ISP-22, a generator PS-39, a microphotometer MF-2, as well as an autotransformer TNN-10 which regulated voltage from 0 to 250 V

Card 1/2

were used. Bismuth was used as inner standard, the method of three etalons being used. A mixture of etalon powder and graphite was burned, and for analysis the electrolyte solution was steamed, dried, and burned with graphite powder. There is 1 figure.

1. Light 2. Spectroscopy 3. Electrolytes--Properties
4. Electrolytes--Analysis

26181
S/081/61/000/012/003/028
B105/B202

24,3500

AUTHOR: Saychenko Yu. M.

TITLE: Ratio of the light sums of ZnS-base crystal phosphors

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 12, 1961, 45, abstract 12Б281. (sb. Optika. Yadern. protsessy. Alma-Ata, 1959, 87-92.)

TEXT: The author studied the amount of the light sums of various ZnS-base crystal phosphors with the admixtures Co, Cu, and Fe on their excitation by means of various lines of the Hg spectrum. On the basis of systematic studies of the scintillation and extinction processes of the luminescence of phosphors as depending on the wavelength of the exciting light, it was concluded that the kinetics of these processes depend very little on the energy of the light quanta exciting the phosphor. For ZnS-base crystal phosphors the monomolecular mechanism of luminescence is not applicable. [Abstracter's note: Complete translation.]

Card 1/1

SAYCHENKO, Yu.M. (Alma-Ata)

Chromatic aberration of the eye. Priroda 51 no.12:110 D '62. (MIRA 15:12)

(Achromatism)

SAYCHUK, K. I.

USSR / Soil Science Tilling. Melioration. Erosion. J

Abs Jour : Ref Zhur - Biologiya, No 11, 1958, No. 48682

Author : Saychuk, K. I.
Inst : Not given
Title : Some Methods of the Preparation of the Soil Plowed in Fall for Corn

Orig Pub : Zemledeliye, 1957, No 8, 37-40

Abstract : On the slightly saline thick chernozems of the Zherbkov Experimental Station in the Odessa region, the early fall plowing promoted the increase in the corn by 0.5-1.4 centners in the years of favorable moisture condition compared with the late October plowing. But in the dry year, early fall plowing reduced the yield by 2.4 centners/ha. The fall harrowing and cultivation of the soil plowed in autumn should be

Card 1/2

USSR / Soil Science Tilling. Melioration. Erosion. J

Abs Jour : Ref Zhur - Biologiya, No 11, 1958, No. 48682

applied in dry years. The additional surface plowing of the corn stubble after the stubble of the predecessors is inexpedient under the conditions of this region. -- S. A. Nikitin

Card 2/2

CHERNYLIVS'KYI, M.S., kand.sel'skokhozyaystvennykh nauk; SAYCHUK, K.I., starshiy nauchnyy sotrudnik (g.Korosten', Zhitomirskoy oblasti).

Valuable fertilizer. Nauka i zhyttia 9 no.1:38-40 Ja '59. (MIRA 12:1)

(Fertilizers and manures) (Peat)

DANILEVSKAYA, Mariya Sergeyevna[Danylevs'ka, M.S.]; GLUSHCHENKO, Ivan Nikitovich [Hlushchenko, I.N.]; SAYCHUK, Konstantin Ivanovich-[Saichuk, K.I.]; SOLODKIY, D.I.[Solodkyi, D.I.], red.; POCHEKINO, L.Kh., tekhn. red.

[Attacking the Polesye virgin lands] Nastup na polis'ku tsilynu. Kyiv, Kyivs'ke oblasne knyzhkovo-gazetne vyd-vo, 1961. 42 p. (MIRA 15:3)

(Polesye—Agriculture)

KUKSIN, N.V., kand.sel'skokhozyaystvennykh nauk; SAYCHUK, K.I.

Fertilizing corn and sugar beets in meadow soils of the Ukrainian Polesye. Zemledelie 25 no.2:52-58 F '63. (MIRA 16:5)

1. Ukrainskiy nauchno-issledovatel'skiy institut zemledeliya (for Kuksin). 2. Zhitomirskaya oblastnaya sel'skokhozyaystvennaya opytnaya stantsiya (for Saychuk).
(Polesye--Corn (Maize)--Fertilizers and manures)
(Polesye--Sugar beets--Fertilizers and manures)

SAYCHUK, V.I., dotsent

Distribution of analyzed and added amino acids between the erythrocytes and blood plasma of healthy horses. Trudy NIVI 1:264-267 '60. (MIRA 15:10)
(Amino acids) (Horses—Physiology)

SAYCHUK, V.I., dotsent; MILENINA, N.G., assistent

Electrophoretic changes in the proteins during the process of preserving diphtheria serum. Trudy NIVI 1:268-276 '60.
(MIRA 15:10)

(Diphtheria antitoxin) (Electrophoresis)
(Proteins)

SAYDA, M.

CZECHOSLOVAKIA/Human and Animal Physiology (Normal and Pathological). Nervous System. General Problems. T

Abs Jour : Ref Zhur Biol., No 6, 1959, 26951

Author : Fink, Z., Pospishil, M., Sayda, M.
Inst : -
Title : On the Problem of the Mechanism of Reflex Action of Acetylcholine.

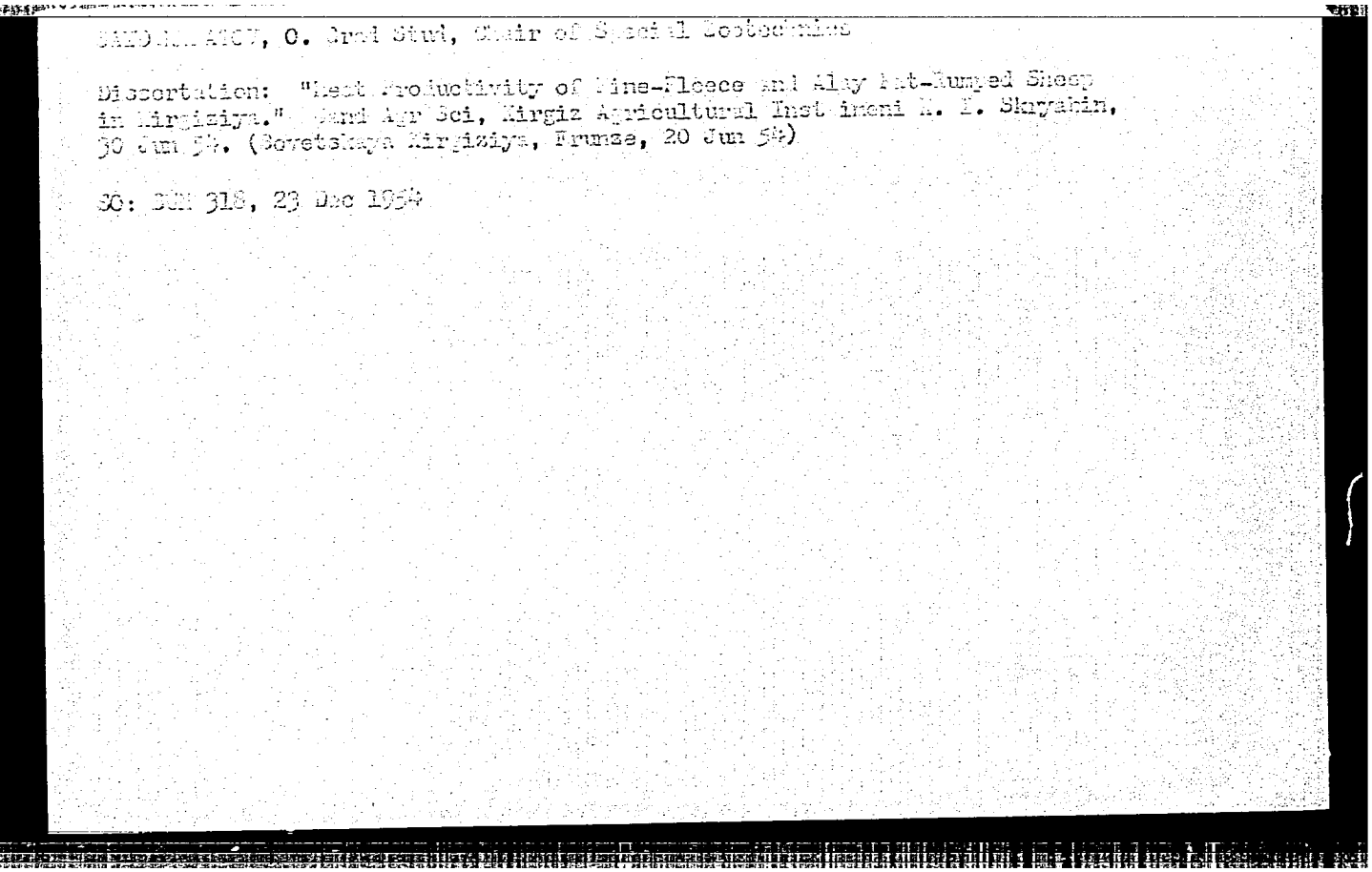
Orig Pub : Physiol. bohemosl., 1958, 7, No 3, 264-270

Abstract : No abstract.

Card 1/1

SAYDAKBAROVA, R.

Some data on the physical development of newborn infants in the Maternity Home No. 1 of Tashkent. Sbor.nauch.trud.TashGMI 22:473-476 '62. (MIRA 18:10)



[redacted], C. Grad Stud, Chair of Special Zootechnics

Dissertation: "Meat Productivity of Fine-Fleece and Alay Fat-Rumped Sheep in Kirgiziya." Grad Agr Sci, Kirgiz Agricultural Inst imeni M. I. Skryabin, 30 Jun 54. (Sovetskaya Kirgiziya, Frunze, 20 Jun 54)

SO: SUM 318, 23 Dec 1954

SAYDAKOV, V.A., inzh.; BUKRABA, M.S., inzh.

Hot forging in small-lot production. Mashinostroenie no.3:35-37 My-Je '62. (MIRA 15:7)

1. Proyektnyy konstruktorsko-tekhnologicheskiy institut Kiyevskogo sovnarkhoza.

(Forging)

NIZOVAYA, A.M., kandidat pedagogicheskikh nauk, redaktor; SAYDAKOVA, Ye.I., redaktor; VOLKOV, A.P., tekhnicheskiy redaktor

[Teachers of geography on their work] Uchitelia geografii o svoei rabote. Pod red. A.M.Nizovoi. Moskva. Pt.2. 1956. 131 p. (MLRA 10:3)

1. Akademiya pedagogicheskikh nauk RSFSR, Moscow. Institut metodov obucheniya.
(Geography--Study and teaching)

SAYDAKOVSKIY, A. G.

26676 Primenenie penitsillina v oftalmologii. Oftalmol. Furnal, 1949, No. 3 s. 121-22

SO: LETOPIS' NO. 35, 1949

SAYDAKOVSKIY, A.G., kand.meditsinskikh nauk; GINZBURG, A.M., ordinator

Nevus flammeus and glaucoma. Oft. zhur. 15 no.5:292-294 '60.
(MIRA 13:9)

1. Iz glaznogo otdeleniya (zav. - A.G. Saydakovskiy) 1-y gorodskoy klinicheskoy bol'nitsy Pecherskogo rayona, Kiyev.
(MOLE (DERMATOLOGY)) (GLAUCOMA)

SAYDAKOVSKIY, G.Ya.

Extracting protective pillars from mine shafts. Biul. TSIIN tsvet. met. no.1:8-9 '58. (MIRA 11:4)

(Shaft sinking)

SAYDAKOVSKIY, G.Ya.

Reducing ore losses and diluting at the Ol'khovka mine of the 3rd International mines. Biul. TSIIN tsvet.met. no.10:8-10 '58. (MIRA 11:9)

(Mining engineering)

POPOV, V.S.; SAYDAKOVSKIY, L.Ya. [Saidakovs'kyi, L.IA.]

Conference of the Organizations of the Main Geological-Prospecting Administration of the Ukrainian S.S.R. on the Stratigraphy of Upper Permian and Triassic Sediments of the Dnieper-Donets Lowland and Donets Basin. Geol.zhur. 22 no.2:114-115 '62. (MIRA 15:4)

1. Glavnoye upravleniye geologii i okhrany nedr pri Sovete Ministrov USSR.
(Dnieper-Donets Lowland--Geology, Stratigraphic)
(Donets Basin--Geology, Stratigraphic)

SAYDAKOVSKIY, L.Ya.

Charophytes from Triassic variegated rocks of the Greater Donets Basin. Dokl.AN SSSR 145 no.5:1141-1144 '62. (MIRA 15:8)

1. Glavnoye upravleniye geologii i okhrany nedr pri Sovete Ministrov USSR. Predstavleno akademikom N.M.Strakhovym.
(Donets Basin--Algae, Fossil)

SAYDAKOVSKIY, L.Ya. [Saidakovs'kyi, L.IA.]; SOKOLOV, V.A.

First paleontological dating of the Dronovskaya series in the Donets Basin and its analogs in the Dnieper-Donets Lowland. Geol. zhur. 23 no.5:91-96 '63. (MIRA 16:12)

1. Glavnoye upravleniye geologii i okhrany nedr pri Sovete Ministrov UkrSSR i trest "Artemgeologiya."

SAYDAKOVSKIY, L.Ya. [Saidakovs'kyi, L.IA.]; SHAYKIN, I.M.

First colloquium on the study of fossil charophytes. Geol. zhur. 23 no.5:110-111 '63. (MIRA 16:12)

SAYDAKOVSKIY, L.Ya. [Saidakovs'kyi, L.IA.]

Stratigraphic significance of Upper Permian and Triassic ostracods in the Dnieper-Donets Lowland. Geol. zhur. 24 no.5:30-40 '64. (MIRA 17:12)

UROSOV, A.V.; SAYDAKOVSKIY, L. Ya.

New data on the Lower Triassic sediments in the southeastern slope of the Voronezh anteclise and western part of the Caspian syneclise. Izv. AN SSSR. Ser. geol. 30 no. 10:110-119 O '65 (MIRA 18:12)

1. Volgogradskiy nauchno-issledovatel'skiy institut neftyanoy i gazovoy promyshlennosti i Upravleniye Glavgeologii Ukr SSR.
Submitted June 13, 1964.

USSR/Geological Prospecting Jun 48
Oil

"Possible Oil Bearings of Paleozoic Formations in the Volyno-Podol'sk Range," S. Z. Saydakovskiy, 2 pp

"Neft Khoz" No 6

This problem has been tackled frequently. Author, however, suggests that comprehensive understanding of Volyno-Podolsk region would be of great benefit for future surveys of subject area.

25/49T32

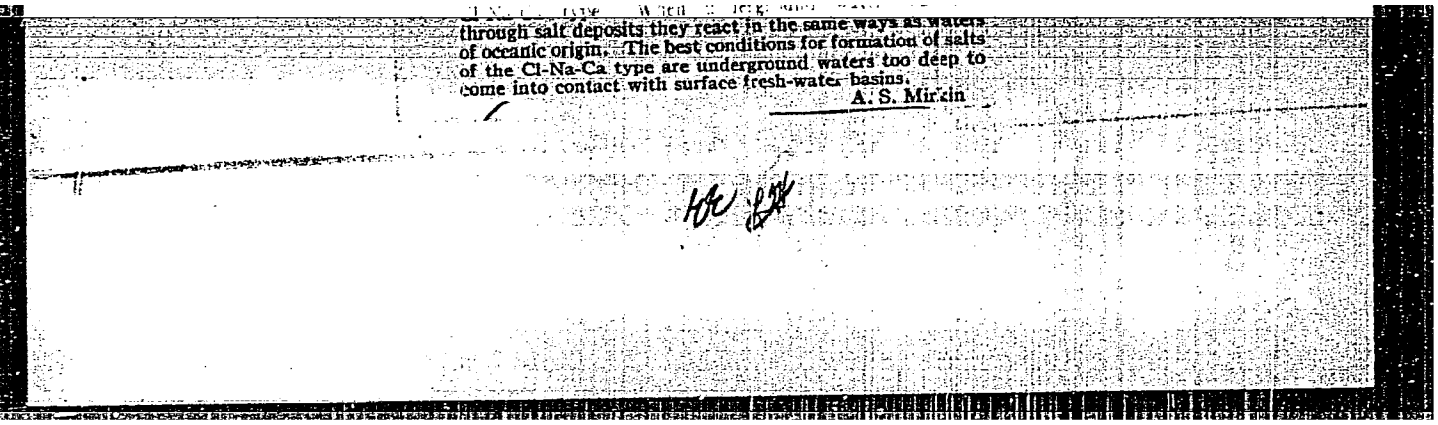
CA

14

Conditions for formation of subterranean waters of chloride-alkali-calcium type. S. Z. Suldakovskil, V. G. Tkachuk, and S. M. Tsvik (Mineral. Inst., L'vov). *Doklady Akad. Nauk S.S.S.R.* **80**, 791-2(1951).—Waters of the above type were found by the authors under extremely variable conditions, at times very close to the surface. It is suggested that $CaCl_2$ appears in such waters from extn. or leaching and by exchange reactions with the minerals in contact with aq. solns., which can occur at any depth, although deep-lying deposits would tend to give waters of more stable compn.

G. M. Kosolapoff

V. Conditions responsible for the formation of underground waters of the chlorine-sodium-calcium type. S. Z. Sadykovskii, V. G. Trachuk, and S. M. Tsvik (Inst. Geol. Mineral Products, Lvov). *Gidrokhim. Materialy* 23, 97–109(1965). Theories advanced in explanation of the formation of underground waters of the Cl-Na-Ca type are discussed



through salt deposits they react in the same ways as waters of oceanic origin. The best conditions for formation of salts of the Cl-Na-Ca type are underground waters too deep to come into contact with surface fresh-water basins.

A. S. Mirzin

SAYDAKOVSKIY, S. Z.

USSR/ Geology - Hydrogeology

Card 1/1 Pub. 22 - 35/45

Authors : Saydakovskiy, S. Z.

Title : Formation of hydrosulfide water in south-western section of Russian platform

Periodical : Dok. AN SSSR 103/2, 303-304, Jul 11, 1955

Abstract : Scientific data are presented on the formation of hydrosulfide containing waters in the south-western parts of the Russian platform.

Institution : .....

Presented by: Academician D. V. Nalivkin, April 23, 1955

SAYDAKOVSKIY, S.Z. (Khar'kov)

Prospecting indications in drilling for water in chalky regions. Vod.i san.tekh. no.7:11-12 Jl '57. (MIRA 10:11)
(Water-supply engineering) (Boring)

SAYDAKOVSKIY, Solomon Zinov'yevich [Saidakovs'kyi, S.Z.], prof.;
MAKARENKO, O.N., dotsent, otv.red.; [redacted]KO, Ya.T., tekhn.red.

[Engineering geology] Inzhenerna geologiia. Kharkiv, Vyd-vo Kharkivs'koho derzh.univ., 1958. 242 p. (MIRA 13:8)
(Engineering geology)

TKACHUK, V.G.; SAYDAKOVSKIY, S.Z.

On V.B.Porfir'ev's and V.F.Linetskii's book "Problems in petroleum migration. Reviewed by V.G.Tkachuk, S.Z.Saidakovskii. Neft.khoz. 32 no.6:93-96 Je '54. (MLRA 7:6)
(Porfirev, V.B.) (Linetskii, V.F.) (Petroleum--Geology)

SAYDAKOVSKIY, Yu. Ya.

Potentiated intravenous barbamil anesthesia. Khirurgiia, Moskva 34 no.11: 96-100 N '58. (MIRA 12:1)

1. Iz kliniki fakul'tetskoy khirurgii (Zav. - prof. G.G. Karavanov) L'vovskogo meditsinskogo instituta (dir. - prof. L.N. Kuzmenko).

(INTRAVENOUS ANESTHESIA
amobarbital potentiation (Rus))
(AMOBARBITAL, anesth. & analgesia
potentiation of intravenous anesth. (Rus))

SAYDAKOVSKIY, Yu.Ya.

Adrenogenital syndrome caused by arrhenoblastoma of the ovary.
Vrach. delo no.12:134-135 D '60. (MIRA 14:1)

1. Vtoroye khirurgicheskoy otdeleniye (zav. - prof. G.G. Karavanov) Lvovskoy oblastnoy klinicheskoy bol'nitsy.
(OVARIES—TUMORS)

SAYDAKOVSKIY, Yu.Ya.

Effect of aminazin, promedol and dimedrol on the duration of barbamyl sleep in normal animals and in radiation sickness. Farm. i toks. 27 no.1:77-81 Ja-F '64. (MIRA 17:11)

1. Klinika fakul'tetskoy khirurgii (zav. - prof. G.G. Karavanov) L'vovskogo meditsinskogo instituta i kafedra farmakologii (zav. - doktor med. nauk N.P. Skakun) Ternopol'skogo meditsinskogo instituta.

SAYDAKOVSKIY, Yu.Ya.; VOVK, G.P.

Effect of potentiated anesthesia on the blood coagulation system. Probl. gemat. i perel. krovi 9 no.8:21-23 Ag '64.
(MIRA 18:3)

1. 2-ye khirurgicheskoye otdeleniye L'vovskoy oblastnoy klinicheskoy bol'nitsy (glavnyy vrach N.I. Besedin) i klinika fakul'tetskoy khirurgii (zav. - prof. G.G. Ivanov) lechebnogo fakul'teta L'vovskogo meditsinskogo instituta.

KHODZHAYEV, G.Kh.; SOKOL'NIKOVA, M.D.; RIZAYEVA, M.; Prinimali uchastiye: BELOPOL'SKAYA, S.; CHABROVA, O.; KUL'METOV, A.; SAYDALIKHODZHAYEV, M.

Shur-Tepe oil field. Uzb. khim. zhur. 9 no. 4:45-50 '65.
(MIRA 18:12)

1. Institut khimii AN UzSSR. Submitted June 2, 1964.

SAYDALIYEV, G.S.

Distribution of visceral leishmaniasis in various regions of the Tashkent area and its control. Med.paraz.i parazit.bol. 29:325-326 '60. (MIRA 13:12)
(TASGKENT PROVINCE--KALA-AZAR)

GUREVICH, Isaak Vladimirovich; SAYDALIYEV, R., red.; SALAKHUTDINOVA, A., tekhn.red.

[Traffic regulations for pedestrians, passengers and cyclists] Kuchada iurish koidalari khakida pieda, passazhir va velosipedchilarga. Toshkent, Uzbekiston SSR davlat nashriëti, 1960. 56 p. (MIRA 14:3)

(Uzbekistan--Traffic regulations)

ALYAVIYA, M.K.; SAYDALIYEV, T.; TASHPULATOV, Yu.T.

Infrared absorption spectra of complex compounds of cadmium halides with aminobenzoic acid isomers. Zhur. neorg. khim. 10 no.6:1493-1495 Je '65. (MIRA 18:6)

1. Tashkentskiy gosudarstvennyy meditsinskiy institut.

KHAMIDOV, D.Kh.; ZUFAROV, K.A.; SAYDALIYEV, Z.G.

Histochemistry of nucleic acids of the adrenal glands following whole-body γ-irradiation with Co^{60}. Radiobiologiia 5 no.3:390-392 '65. (MIRA 18:7)

1. Institut yadernoy fiziki AN UzSSR.