

NELIDOV, V.A., kand. tekhn. nauk

Technical questions and answers. Tserent 30 no.3:21 My-Je '64.
(MLPA 17:11)

MELIDOV, V.M., dots.

Design high production boring machines for the repair industry.

Mekh. sil'. hosp. 9 no. 8:26-27 Ag '58.

(MIRA 11:8)

(Drilling and boring machinery)

(Automobiles--Engines--Cylinders)

NE~~S~~LIDOV, V. N.

137-58-1-1384

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 1, p 184 (USSR)

AUTHORS: Preys, G. A., Nelidov, V. N.

TITLE: An Investigation of the Wear Resistance of Electrically Plated Chromium Coatings (Issledovaniye iznosoustovchivosti elektroliticheskikh khromovykh pokrytiy)

PERIODICAL: Tr. 1-y nauchno-tekhn. konferentsii. Kiyevsk. in-t grazhd. vozdushn. flota. Moscow, 1956, pp 330-347

ABSTRACT: The wear of Cr coatings was studied relative to rate of slip (0.2-12 m/sec) and specific pressure (15-150 kg/cm²). The experimental data are used to provide an explanation of the mechanism of the wear occurring in Cr coatings. The laws that govern the wear of Cr coatings relative to change in velocity and the mechanism of the wear of Cr coatings are the same in principle as for the wear of steel. The effect of lubrication on the rate of wear was also investigated.

N. K.

1. Chromium-plating 2. Chromium--Durability

Card 1/1

НЕЛИКОВ, В. В.

PHASE I BOOK EXPLOITATION SOV/5053

Vsesoyuznaya konferentsiya po treniyu i iznosu v mashinakh. 36, 1958.
 Iznos i iznosostoykost'. Antifrictionnyye materialy (Wear and Wear Resistance. Antifriction Materials) Moscow, Izd-vo AN SSSR, 1960. 273 p. Errata slip inserted. 3,500 copies printed. (Series: Ita: Study, v. 1)

Sponsoring Agency: Akademiya nauk SSSR, Institut mashinovedeniya. Resp. Ed.: M. M. Khrushchov, Professor, Ed. of Publishing House: N. Ya. Klebanov, and S. L. Orpik, Tech. Ed.: F. V. Polynakova.

PURPOSE: This collection of articles is intended for practicing engineers and research scientists.

COVERAGE: The collection, published by the Institut mashinovedeniya, AN SSSR (Institute of Science of Machines, Academy of Sciences USSR) contains papers presented at the III Vsesoyuznaya Konferentsiya po treniyu i iznosu v mashinakh (Third All-Union Conference on Friction and Wear in Machines) which was held April 9-15, 1958. Problems discussed were in 5 main areas: 1) Aerodynamic theory of lubrication and friction; 2) Lubrication and Lubricant Materials (Chairman: G. V. Vinogradov, Doctor of Chemical Sciences); 3) Dry and Boundary Friction (Chairman: M. V. Berysgin, Corresponding Member of the Academy of Sciences USSR, and I. V. Kragel'skiy, Doctor of Technical Sciences); 4) Wear and Wear Resistance (Chairman: M. M. Khrushchov, Doctor of Technical Sciences); and 5) Friction and Antifriction Materials (Chairman: I. V. Kragel'skiy, Doctor of Technical Sciences), and M. M. Khrushchov, Doctor of Technical Sciences, Chairman of the general assembly (on the first and last day of the conference) was Academician A. A. Blagonravov. L. Yu. Kuzbatskiy, Candidate of Technical Sciences, was scientific secretary. The transactions of the conference were published in 3 volumes, of which the present volume is the first. This volume contains articles concerning the wear and wear resistance of antifriction materials. Among the topics covered are modern developments in the theory and experimental science of wear resistance of materials, specific data on the wear resistance of various combinations of materials, methods for increasing the wear resistance of materials, the effects of friction and wear on the structure of certain materials, the mechanism of the wearing of metals, the effect of various types of lubricating materials on mixing, abrasive wear of a wide variety of material, and components under many different conditions, modern developments in antifriction materials, and the effects of finish machining on wear resistance. Many personalities are mentioned in the text. References accompany most of the articles.

WEAR AND WEAR RESISTANCE

1. General Problems of the Theory of Wear. Effect of Various Factors on Wear. Increasing Wear Resistance. Khrushchov, M. M. Modern Trends in the Development of the Science of Wear Resistance of Materials	8
Doletskiy, B. I., I. G. Kosovskiy, M. L. Golitsin, and A. K. Topolova. Classification of Metals and Alloys According to Their Wear Resistance	15
Kragel'skiy, I. V. Wear as a Result of Repeated Deformation of Surface Layers	27
Keldos, V. M. Investigation of the Friction of Chromium Plating in the Absence of Lubrication	33

S/123/62/000/003/C15/018
A004/A101

AUTHOR: Nelidov, V. N.

TITLE: Investigating the resistance to wear of chrome coatings in rolling friction

PERIODICAL: Referativnyy zhurnal, Mashinostroyeniye, no. 3, 1962, 58, abstract 3B327 ("Nauchn. tr. Kiyevsk. avtomob.-dor. in-t", 1960, no. 6, 69-77)

TEXT: The author presents the results of investigating the resistance to wear of chrome coatings in rolling friction (pock-marked wear), both in dry and lubricated friction. For comparing the resistance to wear of electrolytic chrome and steel under the same conditions, tests were carried out with specimens of the heat-treated steel grades 12X2H4A (12Kh2N4A) and 12XH3 (12KhN3). The specimens were chrome-plated according to conditions which, based on data of the practice, ensured the highest resistance to wear. It was found that electrolytic bright chrome (deposited under technological conditions of $D_c = 55 \text{ amp/dm}^2$ and $60 \pm 10^\circ \text{C}$) in rolling friction and at compressive stresses in the deformation area center of $\sigma_{\text{compr}} = 300 \text{ kg/mm}^2$ wears off 4.5 times more than 12Kh2N4A grade

Card 1/3

S/123/62/000/003/015/018

A004/A101

Investigating the resistance to wear ...

steel. The process of pock-marked wear takes place under conditions of plastic deformation of the metal during alternating compressive loads and its oxidation by the air oxygen, which promotes the development of wear. Pock-marked wear is characterized by a breaking off of the chrome coat owing to fatigue phenomena. A lowering of the microhardness of chrome coating by 20% at $\sigma_{\text{compr}} = 300 \text{ kg/mm}^2$ on the races surface in comparison with the non-operating specimen surface can be explained by the tendency of bright chrome to a recrystallization of the metastable phase (hexagonal lattice) into the stable one (cubic face-centered). The mentioned process takes place in the most intensive way during heating, occurring during dry rolling friction and compressive stresses. Under conditions of pock-marked wear of chrome coatings with lubrication at a compressive stress $\sigma_{\text{compr}} = 450 \text{ kg/mm}^2$, the resistance to wear of coatings produced at a cathode current density $D_c = 55 \text{ amp/dm}^2$ and an electrolyte temperature of 60°C , was by 4.5 times lower than that of 12KhN3 grade steel. The highest resistance to wear of chrome coatings operating under lubricated friction were shown by those produced at a cathode density $D_c = 55 \text{ amp/dm}^2$ and 60°C (i. e. having a mean microhardness value $H_{M100} = 1,060 \text{ kg/mm}^2$ and a mean net density of 20 sections/ mm^2). The critical compressive stress for this coating with lubrication amounts to $\sigma_{\text{compr}} = 350 \text{ kg/mm}^2$, while the limit stress admissible is $\sigma_{\text{compr}} = 300 \text{ kg/mm}^2$.

Card 2/3

Investigating the resistance to wear ...

S/123/62/000/003/015/018
A004/A101

If the hardness of chrome coatings is reduced and the net density increased, their resistance to pock-marked wear is reduced. In rolling friction with lubrication on the races the microhardness of chrome coatings did not change, while it was reduced by 20% under dry friction conditions.

[Abstracter's note: Complete translation]

N. Savina



Card 3/3

NEL Gov, I.E.

III. Use of Mathematical Methods in the Solution of Substantive Problems

- 1) O.A. Ervin - The Solution of Extremum Problems for the Ball Sections of a Vessel on the Basis of the Labor Type Factor
 - 2) B.H. Zhelezov - The Graphical-Analytical Method of Determining the Size, Degree of Specialization and Location of Metal-Processing Enterprises
 - 3) I.B. Polkov - The Application of Electronic Computational Techniques to Industrial Enterprise Operations Planning
 - 4) G.A. Smolov - Mathematical Methods in the Organization and Planning of Production
 - 5) A.A. Shvach - The Application of Linear Programming Methods to Agricultural Economic Problems
 - 6) Ya.A. Perlin, B.Y. Kuznetsov - On the Problem of Determining Loss in Initiating Series Production
 - 7) A. Kozlov - A Simplified Method for Economic Comparison of Alternative Technical Decisions in the Chemical Industry
 - 8) P.G. Gordinich - The Economic and Computational Significance of the Efficiency Coefficient of Additional Capital Investment
1. Plenary Session - 10 December 1979, 1600 hours
- 1) Adoption of Decisions by the Conference
 - 2) Concluding Remarks (in the name and on the instruction of the Conference President)

Report of the 1979 Conference on Progress in the Application of Mathematical Methods to Economic Research, Leningrad, 10-11 January 1980.

MUSIN, A.Ch.; NELIKAYEV, M.A.

Using vertical holes in breaking ore in chambers. Trudy Inst.
gor. dela AN Kazakh. SSR 11:16-23 '63. (MIRA 16:8)

(Boring) (Blasting)

KUBANOV, I.M., gornyy inzh.; TITOMIROV, S.A., gornyy inzh.; MELIN, G.I.

Roof control by means of complete caving with mechanized knocking out of supports. Ugol' Ukr. 6 no.1:30-31 Ja '62. (MIRA 15:2)

1. Donetskii nauchno-issledovatel'skiy ugol'nyy institut.
(Mine timbering)

NELIN, N. (Groznyy).

Is rain alone responsible for the fire? Pozh.delo 6 no.1:
14 Ja '60. (MIRA 13:5)
(Fire prevention--Inspection)

~~NELIN, N.~~ (Grosnyy); POLYAKOV, I.; SHIRYAYEV, V. (Perm');
P'YANNIKOV, M. (Balev, Chitinskaya obl.)

Readers' letters. Posh. dele 8 no.10:32 0 '62.
(MIRA 15:10)

1. Nachal'nik poselkevogo otdeleniya militsii, Shiringushi,
Nordskovskaya ASSR (for Polyakov).

(Fire prevention)

GALITSKIY, I.; MELIN, P.

Procedure for issuing bonuses to workers. Sots. trud 8 no.7:
139-143 JI '63. (MIRA 16:10)

NELIN, P. (g.Khartayszk)

Gluing of organic glass. Radio no.9:47 S '62. (MIRA 15:9)
(Flexiglas)

Nelin, V.

PA 23T89

**Radio, Amateur
Radio Equipment**

Jun 1947

"The First Experiment," V. Nelin, 1 1/2 pp

"Radio" Vol XI, No 6

Describes the exhibition of amateur radio equipment in Moscow. Mentions some of the exhibits, among which was a single-band long wave receiver "Malvina," 0-V-1 direct feedback with 2E2N tube. Members of radio station UA3AI played an important part in this exhibition. An even better exhibition is planned during the celebration of the 30th Anniversary of the October Revolution.

23T89

POTLAYCHUK, V.I., kand.sel'skokhoz.nauk; SOLOMAKHINA, V.M., kand.biolog.nauk;
SEMAKOV, V.V., nauchnyy sotrudnik; NELIN, Ye.S., nauchnyy sotrudnik;
MOROZOVA, A.T., assistent; MALININ, V.M.; KOROL', A.P.; BYKOVA, Ye.F.,
mladshiy nauchnyy sotrudnik; CHKHUBIANISHVILI, TS.A., mladshiy
nauchnyy sotrudnik; ASKAROVA, S.A., kand.biolog.nauk; IOFFE, R.Ya.,
kand.sel'skokhoz.nauk

Brief information. Zashch.rast. ot vred. i bol. 9 no.11:51-53
'64. (MIRA 18:2)

1. Vsesoyuznyy institut zashchity rasteniy (for Potlaychuk, Bykova).
2. Kiyevskiy universitet (for Solomakhina).
3. Kamchatskaya sel'skokhozyaystvennaya opytnaya stantsiya (for Semakov).
4. Biologo-pochvennyy institut Dal'nevostochnogo filiala Sibirskogo otdeleniya AN SSSR (for Nelen).
5. Luganskiy sel'skokhozyaystvennyy institut (for Morozova).
6. Zaveduyushchiy Izbaskentskim entomo-flitopatologicheskim uchastkom (for Malinin).
7. Zaveduyushchaya Tashkentskoy tekhnologicheskoy laboratoriyey (for Korol').
8. Gruzinskiy institut zashchity rasteniy (for Chkhubianishvili).
9. Institut botaniki AN Uzbekskoy SSR (for Askarova, Ioffe).

NELINA, N. F.

56-7-44/66

AUTHOR
TITLE

NELINA, N. F.

The Differential Cross Section of the Photoproduction of Pions by Nucleons in Consideration of the d-state. (Differentsial'noye secheniye fotoobrazovaniya π -mezonov na nuklonakh s uchetom d-sostoyaniya.- Russian) Zhurnal Eksperim. i Teoret. Fiziki 1957, Vol 33, Nr 7, pp 271-273 (USSR)

PERIODICAL

ABSTRACT

First, reference is made to several previous papers dealing with this subject. The author here gives a complete expression for the differential cross section of the photoproduction of mesons on nucleons. By means of this expression the author calculated the cross section $\sigma(\theta)$ for such cases in which the mesons are in s-, p-, and d-states. The formulation obtained here contains all previously found expressions for $\sigma(\theta)$ (without taking the d-state into account) as special cases. With the help of this expression for $\sigma(\theta)$ it is possible to determine the relative contribution of the production of mesons in the d-state at various photon energies. In this way it is possible to find out at what energies of the γ - quanta it will become necessary to take this process into account.

CARD 1/2

The Differential Cross Section of the Photoproduction of Pions by Nucleons in Consideration of the d-state.

56-7-44/66

The author then investigates the production of mesons in s-, p- and d-states by photons. All transitions possible in this case are given in a table. Also a rather voluminous expression for the angular distribution of the photomesons in the center of mass system (in consideration of all transitions mentioned here and the interference among them) is written down. There follows a short report on the results obtained by K. Watson Phys.Rev., Vol 95, p 228 (1954). (With 1 table)

ASSOCIATION: Physical Institute "P.N. LEBEDEV" of the Academy of Sciences of the USSR.
(Fizicheskiy institut im. P.N. Lebedeva Akademii nauk SSSR.- Russian)

PRESENTED BY: -
SUBMITTED: 16.2. 1957
AVAILABLE: Library of Congress.

CARD 2/2

YEVTOD'YEVA, M.Ya.; ~~XXXXXXXXXXXXXXXXXXXX~~ MELINA, T.G.

Result of tissue therapy of epilepsy in children. Vopr. pediat. 20 no.
1:12-15 Jan-Feb 1952. (CIML 22:1)

1. Candidate Medical Sciences for Yevtod'yeva. 2. Of the Clinic for
Children's Diseases of the Pediatric Faculty, Rostov State Medical
Institute (Head -- Docent V. S. Shneyderova).

NELIP, I. P.

Dissertation defended for the degree of Candidate of Historical Sciences in the
Institute of History

"The Assistance of the Working Class to Kolkhoz Peasantry in Developing the
Material-Technical Base of Agriculture During the Period of its Sharp Rise, 1953-
1959 (from Materials of the Ukrainian SSR)."

Vestnik Akad, Nauk, No. 4, 1963, pp 119-145

NELIP, K. V.

"Study of the Mechanism of the Oxidation Reaction of Sodium Sulfite in the Presence of Mohr's Salt." Thesis for degree of Cand. Chemical Science Sub. 17 Oct. 49, Moscow State Pedagogical Inst. imeni V. I. Lenin.

Summary 32, 18 Dec. 52, Dissertations Presented for Degrees in Science and Engineering in Moscow in 1949 From Vechernyaya Moskva, Jan - Dec. 1949

BALEZIN, S.A.; NELIPA, K.V.

Inhibitors of chemical reactions. *Khim. v shkole* 18 no.1:17-23
Ja-F '63. (MIRA 16:4)

1. Pedagogicheskiy institut imeni V.I.Lenina, Moskva.
(Inhibition (Chemistry))

WILLIAMS, N. F.

WILLIAMS, N. F. -- "Quantum Theory of the Radiation of an Electron Moving in a Field Magnetic Field." Sov. J. Phys. 1957, 1, 100-104. (Dissertation for the Degree of Candidate in Physicomathematical Sciences).

SO: Techernaya Moskva January-December 1957

NELIPA, N. F.

Nelipa, N. F. The quantum theory of a "radiating" electron. Doklady Akad. Nauk SSSR (N.S.) 85, 1259-1262 (1952). (Russian)

Covers the same point as two recent papers [Judd, Lepore, Ruderman, and Wolff, Physical Rev. (2) 86, 123 (1952); Olsen and Wergeland, ibid. 86, 123-124 (1952)]. The assertion of Parzen [ibid. 84, 235-239 (1951)] that quantum mechanical corrections to the classical formula for the radiation of an accelerated point charge are sufficient to affect the design of synchrotrons, etc. is shown to be based on an incorrect approximation. The classical formula is shown to be well grounded theoretically, in agreement with the recent experiments of D. R. Corson [ibid. 86, 1052-1053 (1952)].

A. J. Coleman (Toronto, Ont.).

*Can & Phys Math Sci
Physics Inst Acad Sci*

SC: 141 6 11040 6/14/1 (unclassified)
vol XIV, no 4, April 1953, pp 341-438

NELIPA, N.F.

SOKOLOV, A.A.

On N.F.Nelipa's article "Quantum theory of luminescent electrons."
A.A.Sokolov. Zhur.eksp. i teor.fis. 24 no.4:488-493 Ap '53. (MLRA 7:10)
(Quantum theory) (Electrons)

MELIPA, N.F.

A.A.Sokolov's article on N.F.Melipa's work "Quantum theory of luminescent electrons." Reviewed by N.F.Melipa. *Zhur. eksp. i teor.fiz.* 24 no.6:730-739 Je '53. (MLBA 7:10)
(Quantum theory) (Electrons) (Sokolov, A.A.)

NEELIPA, NF

Elster, H. J. Quantum theory of a radiating electron. II. 62-1-7/11
Z. Physik, **Tarret**, *Vol. 27*, 421-424 (1954). (Russian)
A more careful evaluation of the quantum corrections to the classical formula for the intensity of radiation of an accelerated electron discussed in a previous paper [Dokl. Akad. Nauk SSSR, (N.S.) **65**, 1259-1262 (1952); MR, **14**, 437] is carried out. It is found to be negligible for an electron in a magnetic field of 10^4 G. with energy below 10^7 Mev.
A. J. Coleman (Toronto, Ont.)

Physics Inst. in P.N. Lebedev Acad. Sci. USSR

NEELIPA, Nikolay Fedorovich, kand.fiz.-matem.nauk; FAYNBOYM, I.B., red.;
LESHKOVTSHEV, V.A., spets.red.

[Atomic energy and nuclear reactors; explanatory text to a set
of posters] Atomnaya energiya i iadernye reaktory; poiasnenie
k serii plakatov. Moskva, Izd-vo "Znanie," 1957. 36 p.
(MIRA 14:1)

(Atomic energy)

(Nuclear reactors)

NELIPA, N.F.

Differential cross section of the photoproduction of π -mesons
on nucleons accounting for d-states. Zhur. eksp. i teor. fiz. 33
no.1:271-273 J1 '57. (MLBA 10:9)

1. Fizicheskiy institut im. P.N. Lebedeva Akademii nauk SSSR.
(Mesons) (Nucleons)

NELIPA, N.F.

AUTHOR: Nelipa, N.F.

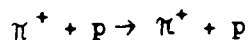
56-5-33/46

TITLE: On the Problem of the Excited States of Nucleons (K voprosu o vzbuzhdennykh sostoyaniyakh nuklonov)

PERIODICAL: Zhurnal Eksperim. i Teoret. Fiziki, 1957, Vol. 33, Nr 5, pp. 1277-1281 (USSR)

ABSTRACT: Markov (ref. 1) proposed a nonlocal equation for the description of excited states. It is now shown theoretically that this equation contains the statement that two strictly separate classes of excited states exist for the nucleons, i.e. short-lived ones (of the order of magnitude 10^{-20} s) and comparatively long-lived ones ($\sim 10^{-10}$ s). These states can be identified by the hyperons. Their occurrence in the intermediate states leads to resonance effects. As an example (in proof of the methodical justification) the reaction $\pi^- + p \rightarrow \pi^- + p$ is computed. It was found that the computed maxima of the total scattering cross section are very close to those found experimentally.

For the process



Card 1/2

AUTHORS: Nelipa, N. F., Feoktistov, V. A.

SOV '86-35 11-11

TITLE: On the Problem of the Polarization of Recoil Nucleons in the Photoproduction of π^- -Mesons (K voprosu o polyarizatsii nuklonov otdachi pri fotoobrazovanii π^- -mezonov)

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki 1968
Vol. 35, No. 1, pp. 244-249 (USSR)

ABSTRACT: The theoretical investigation of the problems connected with the determination of the polarization of recoil nucleons is, in principle, carried out according to two methods: By the application of the density matrix (Ref. 1) and by the phenomenological scattering theory with application of the S-matrix (Ref. 2). In the present paper the endeavor is made to derive a general formulation for P (polarization of recoil nucleons) by the aid of the S-matrix. In contrast to reference 3 the representation of P is even more general. The laws of the conservation of parity and of momentum serve as a basis of derivations. As an example the case of the polarization for the production of pions in s-, p-, and d-states is dealt with. If the d-state is not taken into account, the formulation of P used here goes over into the expression by Feld (Ref. 3).

Card 1/3

On the Problem of the Polarization of Recoil Nucleons in the Photoproduction of π -Mesons

SOV/56-35-1-11/58

(Ref. 1). The reaction $\gamma + N \rightarrow N' + \pi$ is investigated and for

$$P = (d\sigma_+ - d\sigma_-) / (d\sigma_+ + d\sigma_-)$$

is set up. $d\sigma_+$ and $d\sigma_-$ are the differential cross sections of the photoproduction of mesons. For the case of $E_{11}, E_{12}, E_{13}, E_{23}, E_{25}$ and E_{35} - transitions a complete formula (3), which extends over 7 lines, is derived for P, which goes over into Feid's formula for

$$E_{12} = E_{23} = E_{25} = E_{35} = 0$$

There are 1 table and 9 references, 3 of which are Soviet

ASSOCIATION: Fizicheskii institut im. P. N. Lebedeva Akademiya Nauk SSSR (Physics Institute iment P. N. Lebedev, AS USSR)

SUBMITTED: February 24, 1958

Card 2/3

21(0), 24(5)

AUTHOR:

Nelipa, N. P.

3.7.7-1-3-16, 5'

TITLE:

Elastic Scattering of Photons on Excited Nucleons (Uprugoye rasseyaniye fotonov na vozbuzhdennykh nuklonakh)

PERIODICAL:

Zhurnal eksperimental'noy i teoreticheskoy fiziki, 1958,
Vol 35, Nr 3, pp 662 - 667 (USSR)

ABSTRACT:

The occurrence of maxima in the course of measurements carried out of the cross sections of various processes (scattering, pion photoproduction, etc.) is well-known. In order to explain the first of these maxima Tamm worked out a semiphenomenological theory, according to which the scattering of pions (Ref 1) and of γ -quanta (Ref 2) as well as the pion production on nucleons (Ref 3) were dealt with. Another explanation of the occurrence of cross section maxima, which was suggested by Markov (Ref 4), is based on the assumption that the nucleons are in excited states. In an earlier paper (Ref 5) the author dealt with the problem of the scattering of pions on nucleons by using the Markov model; in the present paper the experiences gathered on that occasion

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Elastic Scattering of Photons on Excited Nucleons

SOV/56-45-3-16/61

are utilized for the purpose of calculating the differential elastic scattering cross sections of γ -quanta on excited nucleons. The processes $\gamma + P \rightarrow \gamma' + P'$ (the respective graphs are shown by figure 1) are calculated in first approximation by using the representation for the matrix elements $S_{nn'}$ and $S'_{nn'}$ suggested by Akhiezer and Berestetskii (Ref 6) (laboratory system). The values obtained for the cross sections agree satisfactorily with the experimental data available. (cf. figures 2 and 3): representation of the dependence of differential scattering cross sections on the energy ω_0 of the incident photons for $\theta = 90^\circ$ (c.m.s.), (ω_0 in the laboratory system); diagrams showing the angular distribution of the scattered photons for various primary energies (60, 115, 200 keV); the experimental values are given for purposes of comparison. In conclusion, the author thanks M.A. Maryay for valuable advice and I.A. Yegorova for carrying out numerical computations. There are 3 figures and 12 references, 9 of which are Soviet.

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Elastic Scattering of Photons on Excited Nucleons

SOV, 86-35-3-16/81

ASSOCIATION: Fizicheskiy institut im. P.N. Lebedeva Akademii nauk SSSR
(Physics Institute imeni P.N. Lebedev, AS USSR)

SUBMITTED: February 24, 1986

Card 3, 3

PHASE I BOOK EXPLANATION

01 3-88

Melipa, N.F.

Svyaz' fotoobrazovaniya π -mezonov s rasseyaniyem; s prilozheniyem tablits koeffitsiyentov Klebsha-Gordana, Rakha i Z (Relationship between the Photoproduction and Scattering of π -Mesons; With Supplementary Tables of Clebsch-Gordan, Racah and Z Coefficients) Moscow, Akad. Nauk SSSR, 1959. 87 p. Errata slip inserted. 5,000 copies printed.

Ed.: V.G. Fat'yanov; Tech. Ed.: N.A. Vlasova.

PURPOSE: This monograph is intended for scientific workers in the field of higher-energy nuclear reactions and for students in advanced courses in nuclear physics.

COVERAGE: This booklet gives a systematic review of research studies on the photoproduction of π -mesons on nucleons with scattering, and on the application of the results obtained to the analysis of experimental data. According to the author there is no systematic theory for analyzing the

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Relationship Between the Photoproduction (Cont.)

SOV/3635

experimental data appearing in recent years in phenomena in which mesons take part. The method of analysis discussed is applicable to γ -quanta of any energy. The method becomes more complicated as the energy increases due to corresponding increases in the number of partial waves that must be taken into account. If the treatment is limited to the case where mesons are formed mostly in the s- and p-states, the analysis can be made up to energies of $E_{\gamma} \ll 400$ Mev. The author limits himself to the $\ll 300$ Mev energy region. Experimental data are given, and the expression for the differential cross section of meson photoproduction is derived. The relationship between the processes studied and the application of the results obtained to the analysis of experimental data on meson photoproduction is established. No personalities are mentioned. There are thirty references: 14 English, and 16 Soviet.

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AVAILABLE: Library of Congress

Card 3/3

TR/1st
6-6-66

NELIPA N.F.

15

PHASE I BOOK EXPLOITATION

SOV/5717

Moscow. Inzhenerno-fizicheskiy institut.

Pribery i metody analiza izlucheni; sbornik nauchnykh rabot, vyp. 2. (Apparatus and Methods for the Analysis of Radiation; Collection of Scientific Papers, no. 2) Moscow, Atomizdat, 1960. 166 p. 4000 copies printed.

Sponsoring Agency: Ministerstvo vyushhego i srednego spetsial'nogo obrazovaniya RSFSR. Moskovskiy inzhenerno-fizicheskiy institut.

Ed. (Title page): Ye. L. Stolyarova, Candidate of Physics and Mathematics;
Tech. Ed.: S. M. Popova.

PURPOSE: This collection of articles is intended for specialists in nuclear physics, dosimetry of nuclear radiations, and shielding.

COVERAGE: The articles were prepared by scientists of MIFI (Moscow Physics and Engineering Institute) and presented at the 1957 conference of the Institute. Brief annotations to the articles have been included in the Table of Contents. No personalities are mentioned. References follow each article.

Card 1/8

Apparatus and Methods for the Analysis (Cont.)

SOV/5717

Stolyarova, Ye. L., and G. G. Doroshenko. Delayed Coincidence Unit for Measuring Time Intervals of 10^{-10} - 10^{-7} sec

144

This unit has greater possibilities than other known units. Use of pentodes with secondary emission under special conditions permits blocking of the limiter with one photoelectron from the photocathode. The characteristic impedance of the delay line (150 instead of the usual 92 ohm) enhances the amplitude of the pulse for the incidence selection. At resolving time $2\tau = 2.5$ nsec the recording efficiency is 60%.

Nelipa, N. F. and V. A. Feoktistov. Determination of Small-Phase Pi-Meson Scattering by Nucleons

155

A general equation is given for the polarization of recoil nucleons emerging during the formation of pi-mesons by photons.

Irodov, I. Ye. Resolving Power of Analyzers With a Radially Symmetric Magnetic Field

157

Problems relating to the resolving power of analyzers are discussed.

Card 7/8

NELIPA, N.F.; FEOKTISTOV, V.A.

Determining small scattering phases of π -mesons on nucleons.
Sbor. nauch. rab. MIPI no.2:155-156 '60. (MIRA 14:3)
(Mesons—Scattering)

NELIPA, N.F.; TSAREV, V.A.

Inverse dispersion relations for the photoproduction of π -mesons
on nucleons. Zhur. eksp. i teor. fiz. 38 no.1:259-260 Jan '60.
(MIRA 14:9)

1. Fizicheskly institut im. P.N.Lebedeva AN SSSR.
(Photonuclear reactions) (Mesons) (Nucleons)

NELIPA, N.F.

Double dispersion relations and photoproduction of π -mesons.
Zhur. eksp. i teor. fiz. 40 no.4:1085-1092 Ap '61. (MIRA 14:7)

1. Fizicheskiy institut imeni P.N. Lebedeva AN SSSR.
(Photonuclear reactions) (Mesons)

NELIPA, N.F.; TSAREV, V.A.

Double dispersion relations and the photoproduction of π -mesons.
Zhur. ~~obsp.~~ i teor. fiz. 40 no.6:1710-1712 Je '61.

(MIRA 14:8)

1. Fizicheskiy institut im. P.N. Lebedeva AN SSSR.
(Photonuclear reactions)
(Mesons)

NELIPA, N. F., FILKOV, L. V.

"Dispersion Relations for Compton-Effect on a Proton"

report presented at the Intl. Conference on High Energy Physics, Geneva,
4-11 July 1962

NELIPA, N. F.; TSAREV, V. A.

"The Dispersion Relations for K-Meson Photoproduction on Nucleon and
 Σ -Meson on Hyperon"

report presented at the Intl. Conference on High Energy Physics, Geneva,
4-11 July 1962

S/020/63/148/001/012/032
B125/B102

AUTHOR: Nelipa, N. F.

TITLE: Theory of radiative production of electron-positron pairs on a nucleus

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 148, no. 1, 1963, 68 - 70

TEXT: A general expression is obtained for the differential cross-section of the process $\gamma + \text{nucleus} = \text{recoil nucleus} + e^+ + e^- + \gamma'$ in first non-vanishing perturbation-theoretical approximation. It reads

$$d\sigma = -r_0^2 \frac{Z^2 \gamma^2 |p_1| |p_2| |k_1| |d\Omega_{p_1} d\Omega_{p_2} d\Omega_{k_1} d\Omega_{e^+} d\Omega_{e^-}}{2 (2\pi)^4 \omega_1 \omega^4} \frac{1}{10} Sp F. \quad (1),$$

where

$$Sp F = \frac{Sp11}{\gamma_{11}} + \frac{Sp22}{\gamma_{22}} + \dots + \frac{Sp44}{\gamma_{44}} + 2 \left[\frac{Sp12}{\gamma_{12}} + \dots + \frac{Sp23}{\gamma_{23}} + \dots + \frac{Sp34}{\gamma_{34}} + \dots + \frac{Sp45}{\gamma_{45}} + \dots + \frac{Sp54}{\gamma_{54}} \right]. \quad (3).$$

Card 1/2

Theory of radiative production...

S/020/63/148/001/012/032
B125/B102

The order of magnitude of this cross-section amounts to $\sim 1/137$ of the pair-production cross-section. $k_1(\omega_1, \vec{k}_1)$, $k_2(\omega_2, \vec{k}_2)$, $p_1(\epsilon_1, \vec{p}_1)$, $p_2(\epsilon_2, \vec{p}_2)$ and $q(0, \vec{p}_1 + \vec{p}_2 + \vec{k}_2 - \vec{k}_1)$ are the energy-momentum vectors of the incident photon, the emitted photon, the positron, the electron, and the recoil nucleus, respectively. The six graphs contributing to the matrix element are obtained by all possible permutations of the photon lines. Meanwhile, the electron lines and the positron lines remain unaltered. The only important tracks among the 21 present are tracks 11, 12, 14, 15, 22, 23 and 24. The others can be obtained from these by permutation. There is 1 table. ✓

ASSOCIATION: Fizicheskiy institut im. P. N. Lebedeva Akademii nauk SSSR
(Physics Institute imeni P. N. Lebedev of the Academy of Sciences USSR)

PRESENTED: July 10, 1962, by Ya. B. Zel'dovich, Academician

SUBMITTED: June 15, 1962

Card 2/2

S/020/63/14B/002/018/037
B108/B186

AUTHOR: Nelipa, N. F.

TITLE: On the theory of the double Compton effect on the
electron

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 148, no. 2, 1963,
311-313

TEXT: A general expression for the differential cross section of the
double Compton effect is calculated in first nonvanishing approximation
of perturbation theory: ✓

$$d\sigma = r_0^2 \frac{\alpha \omega_1 \omega_2 d\Omega_{k_1} d\Omega_{k_2} d\omega_3}{(2\pi)^4 16 \omega_1 \omega_2 [1 - v_1 \cos(\rho_1 k_1)]} \frac{1}{16} \text{Sp } F. \quad (1)$$

Card 1/3

On the theory of the double ...

S/020/63/148/002/018/037
B108/B186

$$r_0 = \alpha = \frac{f^2}{4\pi}; \quad v_2 = \frac{|P_2|}{\epsilon_2},$$

$$\text{Sp } F = \text{Sp} \left\{ \left[\frac{\gamma_\mu (\hat{g}_0 + 1) \gamma_l (\hat{j}_1 + 1) \gamma_v}{\rho_2 k_2 \cdot \rho_1 k_1} + \frac{\gamma_\mu (\hat{g}_0 + 1) \gamma_v (\hat{j}_2 + 1) \gamma_l}{-\rho_2 k_2 \cdot \rho_1 k_3} + \right. \right.$$

$$\left. + \frac{\gamma_l (\hat{g}_2 + 1) \gamma_\mu (\hat{j}_1 + 1) \gamma_v}{\rho_2 k_3 \cdot \rho_1 k_1} + \frac{\gamma_v (\hat{g}_2 + 1) \gamma_\mu (\hat{j}_2 + 1) \gamma_l}{\rho_2 k_1 \cdot \rho_1 k_3} + \right.$$

$$\left. + \frac{\gamma_v (\hat{g}_3 + 1) \gamma_l (\hat{j}_3 + 1) \gamma_\mu}{\rho_2 k_1 \cdot \rho_1 k_2} + \frac{\gamma_l (\hat{g}_3 + 1) \gamma_v (\hat{j}_3 + 1) \gamma_\mu}{-\rho_2 k_3 \cdot \rho_1 k_2} \right] (\hat{\rho}_1 + 1) \times$$

$$\times \left[\frac{\gamma_v (\hat{j}_1 + 1) \gamma_l (\hat{g}_0 + 1) \gamma_\mu}{\rho_2 k_2 \cdot \rho_1 k_1} + \frac{\gamma_l (\hat{j}_2 + 1) \gamma_v (\hat{g}_0 + 1) \gamma_\mu}{-\rho_2 k_3 \cdot \rho_1 k_3} + \right.$$

$$\left. + \frac{\gamma_v (\hat{j}_1 + 1) \gamma_\mu (\hat{g}_2 + 1) \gamma_l}{\rho_2 k_3 \cdot \rho_1 k_1} + \frac{\gamma_l (\hat{j}_2 + 1) \gamma_\mu (\hat{g}_3 + 1) \gamma_v}{\rho_2 k_1 \cdot \rho_1 k_2} + \right.$$

$$\left. + \frac{\gamma_\mu (\hat{j}_3 + 1) \gamma_l (\hat{g}_3 + 1) \gamma_v}{\rho_2 k_1 \cdot \rho_1 k_2} + \frac{\gamma_\mu (\hat{j}_3 + 1) \gamma_v (\hat{g}_2 + 1) \gamma_l}{-\rho_2 k_3 \cdot \rho_1 k_2} \right] (\hat{\rho}_2 + 1) \Big\}; \quad (2)$$

$$g_0 = p_2 + k_2, \quad g_2 = p_2 + k_3, \quad g_3 = p_2 - k_1, \quad f_1 = p_1 + k_1, \quad f_2 = p_1 - k_3, \quad f_3 = p_1 - k_2,$$

Card 2/3

On the theory of the double ...

S/020/63/148/002/018/037
B108/B186

$ab = a_0 b_0 \left[1 - \frac{|a||b|}{a_0 b_0} \cos(ab) \right]$. $k_1(\omega_1, \vec{k}_1)$ and $p_1(\epsilon_1, \vec{p}_1)$ are the energy-momentum vectors of the incident and of the two emitted photons, and of the initial and final electron ($i = 1, 2, 3$; $l = 1, 2$). The complicated factor $S_{\Phi F}$ is calculated. There is 1 table.

ASSOCIATION: Fizicheskii institut im. P.N. Lebedeva Akademii nauk SSSR
(Physics Institute imeni P.N. Lebedev of the Academy of Sciences USSR)

PRESENTED: July 10, 1962, by Ya. B. Zel'dovich, Academician

SUBMITTED: June 15, 1962

Card 3/3

NELIPA, N.R., fel'dsher (selo Konovalovka Poltavskoy oblasti)

Exchange of experience in child care at nursery age on a collective
farm. Fel'd. 1 akush. no.9:38-39 S '54. (MLRA 7:11)

(CHILD WELFARE

in Russia, nurseries in collective farms during spring
& summer)

MELIPA, H.R., fel'dsher (selo Konovalovka Poltavskoy oblasti)

Water supply for rural areas, collective farms, state farms, and
machine-tractor stations. Fel'd.i akush. no.5:42-43 M7 '55.

(WATER SUPPLY,

(MLRA 8:7)

in rural areas in Russia)

(RURAL CONDITIONS,

water supply in Russia)

NELIPA, N.R., (Fel'dsher (selo Konovalovka Poltavskoy oblasti)

My participation in dispensary service for leading groups of
workers on a collective farm. Fel'd i akush. no.9:39-40 S '55.
(PUBLIC HEALTH, (MLRA 8:11)
in Russia, in collective farm)

Нелипа, Н.Р.

NELIPIA, N.R., fel'dsher (s. Konovalovka Poltavskoy oblasti)

~~Outpatient services.~~ Fel'd. i akush. 23 no.2:40-41 Y '59.
(MEDICINE, RURAL) (MIRA 11:3)

HELIPA, N.R., fel'dsher (selo Konovalovka Poltavskoy oblasti)

Organizing a public health group and its employment at the feldsher-
midwife station. Fel'd. i akush 23 no.9:48-49 8'58 (MIRA 11:10)
(PUBLIC HEALTH)

NELIPA, H.R., fel'dsher (selo Konovalovka Poltavskoy oblasti)

Study of accidents at the feldsher-midwife center. Fel'd. 1
akush. 24 no.5:45-46 My '59. (MIRA 12:8)
(KONOVALOVKA (POLTAVA PROVINCE)--AGRICULTURE--ACCIDENTS)

KOZYR', I.P.: NELIPOVICH, A.A.

Milling attachment for lathes. Sbor.rats.predl.vnedr.v proizvod.
no.l:53 '61. (MIRA 14:7)

1. Chelyabinskiy truboprokatnyy zavod.
(Lathes--Attachments)

ACC NR: AR7000828 (N) SOURCE CODE: UR/0272/66/000/010/0078/0078

AUTHOR: Nelipovich, N. B.

TITLE: Pressure and velocity sensors using photodiodes and photoresistors

SOURCE: Ref. zh. Metrologiya i izmeritel'naya tekhnika, Abs. 10.32.553

REF SOURCE: Sb. Vopr. vodn. kh-va Belorussii. Minsk, Nauka i tekhnika, 1965, 206-209

TOPIC TAGS: pressure ^{measuring instrument} ~~sensor~~, velocity ^{measuring instrument} ~~sensor~~, photodiode, photoresistor

ABSTRACT: A description is given of the designs of sensors with various elastic (ferrite, spring) elements using photodiodes and photoresistors as light-sensing elements. These sensors were developed at the Laboratory of Water Management Equipment of the Institute of Water Problems of the State Planning Commission BSSR. The principle of their operation is that during the deformation of the elastic element caused by the force being measured, the light ray striking the surface of the photodiode or photoresistor is partly obscured. The circuit current also varies with the variation in photoresistor illumination, and its value is registered with a recorder. Tests carried out under operating conditions have shown that the

Card 1/2

UDC: 531.787.083.8

ACC NR: AR7000828

sensors can be used in investigating the dynamic interaction of fluxes with the elements of structures both under laboratory and field conditions. [Translation of abstract] [DW]

SUB CODE: 09/4

Card 2/2

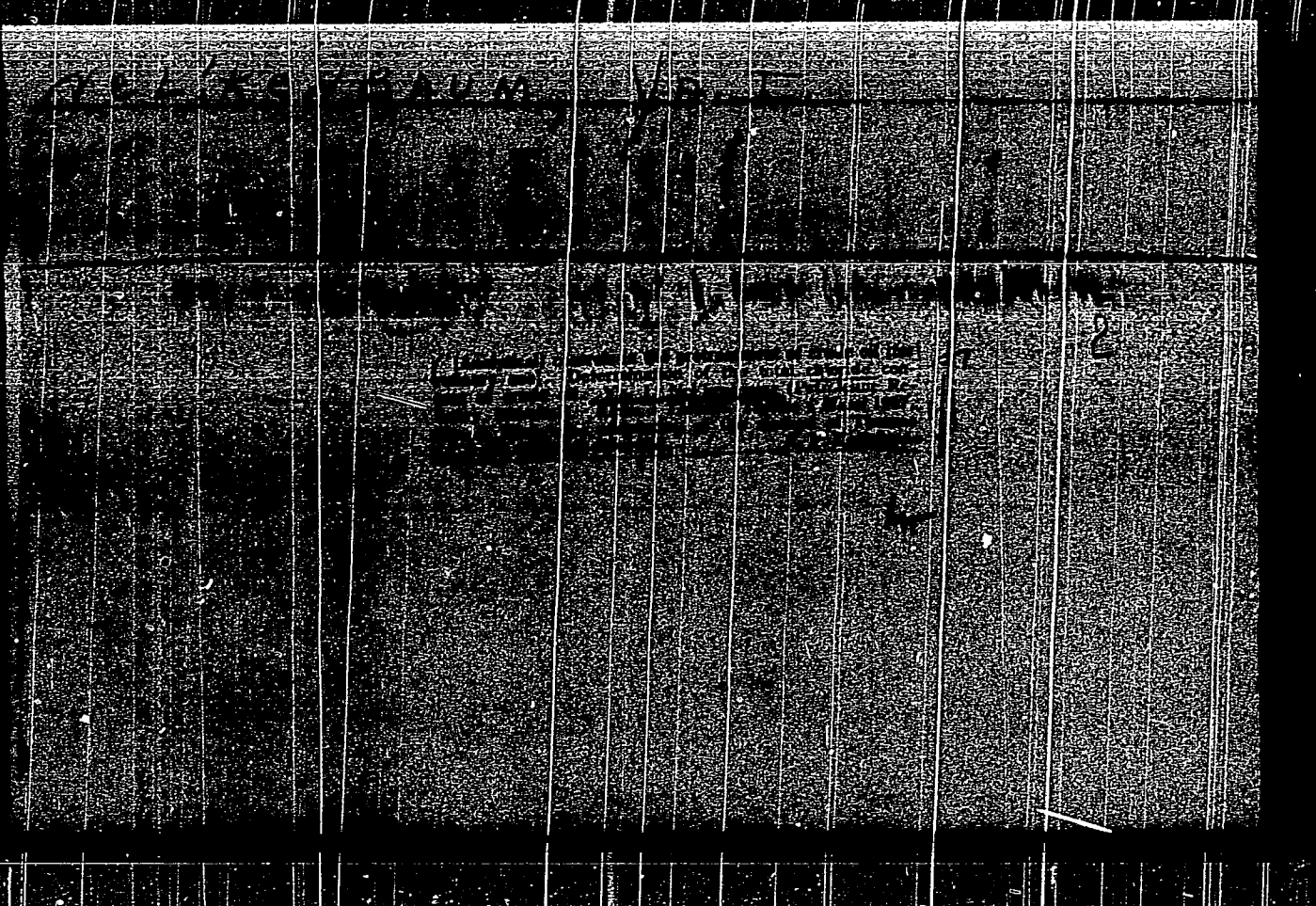
CHEPOVETSKIY, I.Kh., inzh.; NELIPOVICH, P.V., inzh.; GUSHCHIN, I.A., inzh.

Diamond honing of parts made of hardened steel. Mashinostroenie
no.5:27-30 S-0 '65. (MIRA 18:9)

NELIPOVICH, S.

Drying lupine seeds. Mik.-elev. prom. 25 no.11:14-15 H '59
(MIRA 13:3)

1. Nachal'nik semenogo otdela Zhitomirskogo upravleniya
khleboproduktov.
(Lupine--Drying)



NEL'KENBAUMI, Ya. I

11(4) - p 3, 14

PHASE I BOOK EXPLOITATION

SOW/1319

Akademiya nauk SSSR. Bashkirskiy filial

Khimiya sera-organicheskikh soyedineniy, soderzhashchikh v neft'yakh i nefteproduktakh; materialy II nauchnoy sessii (Chemistry of Sulfur-Organic Compounds Contained in Petroleum Products; Papers of the 2nd Scientific Session) v. 1. Ufa, Izd. Bashkirskogo filiala AN SSSR, 1958. 228 p. 1,500 copies printed.

Ed.: Sudarkina, K.I.; Editorial Board: Ayvazov, B.R., Mashkina, A.V., Obolentsev, R.D. (Resp. Ed.), Rozhdestvenskiy, V.P., and Shanin, L.L.; Tech. Ed.: Rakhimov, R. Sh.

PURPOSE: This book is intended for petroleum specialists of scientific research establishments, educational institutions, and petroleum refining plants.

COVERAGE: This collection is the first of a multivolume publication on the results of scientific research work carried out in the Soviet Union on the chemistry and technology of sulfur- and nitrogen-organic compounds during the period 1954-1955; and according to a coordinated research project outlined in 1956 by the sponcering

Card 1/15

4

Chemistry of Sulfur-Organic Compounds (Cont.)

SOV/1319

agency (Bashkir Branch of the Academy of Sciences USSR). Along with the 22 reports published herein, abridged versions of questions, answers and discussions are given wherever the editors deem it expedient.

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The author states that three-quarters of the petroleum drilling in the USSR is concentrated in eastern ("vnekavkazskiy" - outside the Caucasus) oil fields; that these deposits are sulfurous; and that research on the exploitation of these deposits is insufficient.	
Obolentsev, R.D. Sulfur-Organic Compounds of Petroleum Origin	8
This article points out the need for a new process of directly distilling sulfurous petroleum, which process, it is stated, may be based on the thermostability of sulfur-organic compounds.	
Obolentsev, R.D., and B.V. Ayvazov, Cyclic Sulfides in the Kerosene Distillate of Petroleum From the Carboniferous Deposits of Tuzmazy Oilfields	19

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4

Chemistry of Sulfur-Organic Compounds (Cont.)

SOV/1319

Sulfur-organic compounds were separated from kerosene fractions of petroleum and physical constants (including molecular formulas, refractive indices, etc.) were determined corresponding to mono-, bi- and tricyclic sulfides. Experimental data on the fractional distillation of these compounds (which vaporized at 209-210° C) compared with known data identified them as 3-butylthiophenes [tetrahydro 3-butylthiophenes]. A.D. Biktasheva and N.S. Lyubopytova carried out the spectrographic analyses.

Ivanova, N.M., Ch. Kh. Mirkhaydarova, and Ya. I. Nel'kenbaev (Ishimbayskiy neftepererabatyvayushchiy zavod--Ishimbay Oil Refining Plant)
Installation for Chromatographic Separation of Sulfur-Containing Compounds
From Petroleum Distillates

29

Illustrations, schematic diagrams of apparatus and a table of data are given for the chromatographic analysis of the sulfur content of Ishimbay petroleum after pyrolysis.

Gorskaya, N.G. (Novo-Ufimskiy neftepererabatyvayushchiy zavod -- New Oil Refining Plant at Ufa) On the Problem of Constructing Larger Chromatographic Installations for Separating Concentrates of Sulfur-Organic Compounds From Petroleum Products

38

Card 3/25

4

Chemistry of Sulfur-Organic Compounds (Cont.)

SOV/1319

<i>Speeches:</i> Fyasnyanskaya, A.G., Junior Scientific Worker, Vsesoyuznyy nauchno-issledovatel'skiy institut neftyanoy promyshlennosti (All-Union Scientific Research Institute for the Petroleum Industry)	216
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Ratovskaya, A.A., Junior Scientific Worker, Otdel khimii Bashkirskogo filiala AN SSSR (Department of Chemistry, Bashkir Branch AS USSR)	220
Ayvazov, B.V., Candidate of Chemical Sciences, Senior Scientific Worker, Otdel khimii Bashkirskogo filiala AN SSSR (Department of Chemistry Bashkir Branch AS USSR)	221
<u>Nel'kenbaum, Ya. I.</u> , Engineer, Ishimbayskiy neftepererabatyvayushchiy zavod (Ishimbay Oil Refining Plant)	223
 Gol'dshteyn L.L., Candidate of Chemical Sciences, Senior Scientific Worker, Vsesoyuznyy nauchno-issledovatel'skiy institut neftyanoy promyshlennosti, (All-Union Scientific Research Institute for the Petroleum Industry)	 225

Card 24/25

7/4

MATSKEVICH, V.V.; NEL'KENBAUM, Ya I.

Continuous alkylation of phenyl with diisobutylene in the presence
of SDMS cation exchanger. Nefteper. i nertekhim. no.7:34-36 '64.
(MIRA 17:11)

1. Ufinskiy neftepererabatyvayushchiy zavod. im. XXII s"yezda
Kommunisticheskoy partii Sovetskogo Soyuza.

AUTHOR: Nel'kenbaum, Ya.I.

32-3-'4/52

TITLE: The Determination of Petroleum Products in Waste Water by the Pycnometric Method (Opredeleniye nertseproduktov v stochnoy vode piknometricheskim metodom)

PERIODICAL: Zavodskaya Laboratoriya. 1958, Vol. 24, Nr 3, pp. 289-291 (USSR)

ABSTRACT: Determinations are carried out by an extraction with carbon tetrachloride or a mixture with benzene (specific weight 1.3-1.4) and a following measuring of the specific weight by means of a pycnometer. From the difference of the specific weights, the solvent, and the extract it is then possible, according to a given formula, to calculate the content of mineral oil (the specific weight of which is known) of the waste water. If mixtures of solvents are used, the exact determination of the specific weight of each individual component is of the greatest importance. All measurements must be carried out at a certain temperature fixed at $\pm 0.001^{\circ}$ C. A suggestion relating to a suitable thermostat is made and the manner of determination is given. The pycnometer recommended by Levin is described as unsuitable. The accuracy of

Card 1/2

The Determination of Petroleum Products in Waste Water
by the Pycnometric Method

32-3-14/52

determination depends upon the quantity of mineral oil contained in the waste water (concentration) and varies between 3 and a maximum of 10%. Up to 16 analyses can be carried out in this way in the course of one day by one laboratory worker; the poisonous character of the extraction medium must be taken into account. There is 1 table, and 1 reference, 0 of which is Slavic.

ASSOCIATION: Ishimbay Oil Refining Plant (Ishimbayevskiy
neftepererabatyvayushchiy zavod)

AVAILABLE: Library of Congress

1. Waste water-Petroleum-Determination
2. Pycnometer-Applications

Card 2/2

SORKIN, Ya.I.; NEL'KENBAUM, Ya.I.; MAMINA, F.A.

Vat residues of fatty acids as raw materials for the production of non-ion-forming demulsifiers. Khim.i tekhn. topl.i nasel 6 no.2: 28-32 F '61. (MIRA 14:1)

1. Chernikovskiy neftepererabatyvayushchiy zavod.
(Acids, Fatty) (Emulsions)

SORKIN, Ya.G.; NEL'KENBAUM, Ya.I.; MAMINA, F.A.

New nonionogenic demulsifiers for eastern oils. Trudy Basn NIINP no.5:
322-332 '62. (MIRA 17.10)

1. Chernikovskiy neftepererabatyvayushhiy zavod.

SORKIN, Ya.G.; NEL'KENBAUM, Ya.I.; GABDRAKHMANOV, F.Kh.; KHAKIMOV, F.G.;
SAYFUTDINOV, M.Z.

Industrial testing of the OKO nonionogenic demulsifying compound
on Romashkino oils. Khim.i tekhn.topl.i masel 7 no.9:24-27
S '62. (MIRA 15:8)

1. Chernikovskiy neftepererabatyvayushchiy zavod.
(Chernikovsk--Petroleum--Refining) (Emulsions)

1 1097-65

REF(1)/REF(2)/REF(3) 10-1/1-1 10

S/0318/64/000/107/001/0016

ACCESSION NO. APPROVED

AUTORS: Nefedov, V. V. Nefedov, V. I.

TITLE: Continuous alkylation of phenol with diisobutylene in the presence of the SDMS cation exchange resin

SOURCE: Neftepererabotka i neftekhimiya, no. 7, 1964, 34-36

TOPIC TAGS: phenol alkylation, continuous alkylation, diisobutylene, cation exchange resin, methylstyrene copolymer, divinyl copolymer, alkyphenol / SDMS resin

ABSTRACT: The SDMS cation exchange resin, a methylstyrene-divinyl copolymer produced by the Silevat Comb, was studied as a catalyst for the alkylation of phenol. A continuous alkylation process was carried out by means of a pilot-plant unit. The effect of various factors on the course of the process, extent of the reaction, and quality of the product obtained could thus be determined. The highest yield of alkyphenol (79.8% of the theoretical) was obtained with a dry catalyst; an increasing moisture content lowered the yield. The optimum temperature of the process was found to be 115-120C. The optimum weight ratio of the starting materials, phenol and diisobutylene, was 1:2. The optimum feed rate of this mixture was 0.4-0.5 cm/hr per gram of catalyst. Under continuous process conditions, a freshly charged catalyst can work up to 100 hrs. without regeneration. One gram

D-1597-5

ACCESSION NO. 1597-5

of catalyst regeneration, under optimum conditions, the yield of alkylphenol was 79-7% of the theoretical. The authors conclude that this catalyst can be used to advantage in a continuous alkylation process. Orig. has 2 figures and 1 table.

The SDS catalyst was also used to alkylate phenol. The yield of alkylphenol was 79-7% of the theoretical. The authors conclude that this catalyst can be used to advantage in a continuous alkylation process. Orig. has 2 figures and 1 table.

ASSOCIATION OF CHEMICAL ENGINEERS, INC. (USA)

DATE: 1974
 BY: [illegible]
 FOR: [illegible]

Cont 2/2

NELKOV, P.; MACHEV, S.

Mixed cooking of coniferous and broad-leaved wood pulp by the sulfate method. p.31. TEZHKA PROMISHLENO T. (Ministerstvo na tezhkata promishlenost) Sofia. Vol. 5, no. 1, 1956

SOURCE: East European Accessions List, (EEAL), Library of Congress, Vol. 5, no. 12, December 1956

NELKYUDOV, B. M.

NELKYUDOV, B. M.: "Some procedures in the agricultural engineering of peas in Gor'kiy Oblast". Gor'kiy, 1955. Min Higher Education USSR. Gor'kiy Agricultural Inst. (Dissertations for the Degree of Agricultural Sciences)

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

RINKIS, G.; NELLANDE, A., red.

[Determining macroelements and microelements; how to determine, by fast colorimetric methods, macroelements and microelements in plants, soils, water, and animals] Makroelementu un mikroelementu noteiksana; ka noteikt ar stram kolorimetriskam metodem makroelementus un mikroelementus augos, augsnes, udeni un dzīvniekos. Rīga, Latvijas Valsts izd-ba, 1964. 136 p. [In Latvian]
(MIRA 17:6)

NEELIN, V.I., kand. tekhn. nauk; TUKTAYEV, I.I., kand. tekhn. nauk;
BOGATYEV, N.Ya., inzh.

Operation of the brush contact of an electrical machine at
increased current densities. Elektrotehnika 39 no. 11:91-103,
1964.

NELLIN, V.I., kand. tekhn. nauk; TUKTAYEV, I.I., kand. tekhn. nauk;
BOGATYREV, N.Ya., inzh.

Concerning the article "Vibration of the brush assembly".
Elektrotehnika 35 no.10:35-36 O '64.

(MIRA 10:11)

NELLIN, V.I., kand. tekhn. nauk; TUKTAYEV, I.I., kand. tekhn. nauk;
LOZHKIN, L.V., inzh.

Effect of external vibrations on the sparking of low power
collector-type machines. Elektrotehnika. 36 no.9:49-53 S '65.
(MIRA 18:9)

NELLINGER, A.N.; LABADIN, S.I.

Necessary book. Metallurg 16 no.8:40 Ag '61.

(MIRA 17:11)

1. Gosudarstvennyy soyuznyy institut po proyektirovaniyu metallurgicheskikh zavodov.

L 45084-66

ACC NR: AP6023605 (N)

SOURCE CODE: UR/0308/66/000/007/0023/0023

AUTHORS: Suprun, L. (Candidate of technical sciences, Chief); Nellis, A. (Engineer, ²⁹
Deputy chief) ²⁸ORG: Corrosion Laboratory of TsNIIMF /headed by Candidate of technical sciences L. ^B
Suprun /((Laboratoriya korrozii TsNIIMF); Engineering Division of the Baltic Steamship
Line /deputy chief engineer A. Nellis /((Tekhnicheskiy otdel Baltiyskogo parokhodstva)

TITLE: A protective shield for ballast tanks on dry cargo ships

SOURCE: Morskoy flot, no. 7, 1966, 23

TOPIC TAGS: water tank, cargo ship, ship component, corrosion protection, protective
shield, aluminum alloy, paint, sea water corrosion/ AMTs-15-10 aluminum alloy, N-1
protective shield, EKZhS-40 ethynol paintABSTRACT: In June 1964 type N-1²⁶ sea water corrosion protection shields¹⁰ made of the
aluminum alloy AMTs-15-10 (15% Mg, 10% Zn) were mounted on the dry cargo ship
"Stanislavskiy" in the Kanonerskiy shipyard. Thirty-two of the shields measuring
60 x 150 x 500 mm were connected by steel brackets to the bottom of the ballast tanks,
one in each section. Each shield protected a 30-m² surface. To distribute uniformly
the current generated by the shields, six layers of EKZhS-40¹⁵ ethynol paint¹⁵ were
applied to the bottom face of the shields and to the tank bottom in a 500 x 700 mm
area at the point of the shield attachment. When underway the air outlet is open to

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UDC: 629.123:620.197.1

L 45084-66
ACC NR: AP6023605

vent the hydrogen generated from the tanks. An inspection in May 1965 showed no rusting and a uniform 15--20% shield erosion. The only maintenance required called for cleaning of the aluminum alloy decomposition products from the shields. The test showed that these plates together with other means provide a reliable and inexpensive method of salt water corrosion prevention in ballast tanks. The shields should last a minimum of 2--3 years. Orig. art. has: 1 figure.

SUB CODE: 13,11/SUBM DATE: none

Card 2/2 blg

NELOVKIN, P.D.

Results of tagging *Cyprinus carpio* L. in the lower course of the
Volga River and in its delta. Vop. ikht. 3 no. 1:163-170 '63.

(MIRA 16:2)

1. Kaspiyskiy nauchno-issledovatel'skiy institut rybnogo
khozaystva i okeanografii (KaspNIRO), Astrakhan'.
(Volga River—Carp) (Fish tagging)

NELOVKIY, N.M.

Modernized automatic screw machine. Mashinostroitel' no.6:19
Je '62. (MIRA 16:5)
(Phosphate coating--Equipment and supplies)

NELOVYI, N.M., inzh.

Automation of electroplating processes. Mekh. i avtom. proizv.
17 no.12:3-5 D'63. (MIRA 17:2)

NELOVKIY, N. M.

Semiautomatic worm chromium-plating machine. Mashinostroitel'
no.6:20 Je '63. (MIRA 16:7)

(Chromium plating--Equipment and supplies)

BELOV, K.P.; IVERONOVA, V.I.; ZAYTSEVA, M.A.; KADOMTSEVA, A.M.; KATSEL'SON, A.A.; YATSKUL'YAK, K.

Magnetic and structural properties of lanthanum orthoferrite with partial substitution of Fe^{3+} ions by other trivalent ions.
Fiz. tver. tela 6 no.1:101-107 Ja '64. (MIRA 17:2)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova.

NEL'SON, I.A.; MAKHINKO, V.V.

Study of the physicommechanical properties of the rocks in the
Kizel Basin coal bearing series. Nauch. trudy Perm NIUI no.31
54-65 '63. (MIRA 17:3)

NEL'SON, I.A.; STOLYAROV, L.I.

Parameters of the atmosphere of inhalatoriums with electro-
aerosol equipment. Nauch. trudy Perm NIWI no. 4:179-185
'62. (MIRA 17:6)

NEL'SON, I.A., inzh.

Practice of developing, equipping, and studying electric aerosol
apparatus for preventing and treating occupational pneumoconiosis.
Sbor. rab. po silik. no.3:163-170 '61. (MIRA 15:10)

1. Permskiy nauchno-issledovatel'skiy ugol'nyy insititut.
(LUNGS - DUST DISEASES) (AEROSOL THERAPY)

NEL'SON, I.A.; STOLYAROV, L.I.

Apparatus for group electroaerosol therapy and preventive
action. Med. prom. 16 no.1:52-57 Ja '62. (MIRA 15:3)

1. Permskiy nauchno-issledovatel'skiy ugol'nyy institut.
(INHALATION THERAPY--EQUIPMENT AND SUPPLIES)

NEL'SON, I.A.; KAGANOVA, E.Ya.; SAVINA, E.A.

Introduction of the ultrasonic method of controlling the quality
of reinforced concrete products. Nauch. trudy PermNIUI no.5:
81-94 '63. (MIRA 18:3)

NEI'SON, I.A.; PROKHOROV, G.A.; KAGANOVA, E.Ya.

Method and device for controlling the thickness of the protective
layer of concrete. Nauch. trudy PermNIUI no.5:73-80 '63.
(MIRA 18:3)

NEL'SON, I.A.; NOVOZHILOV, Yu.L.; KOTKOVSKAYA, E.D.

Preliminary treatment of water with ultrasonic and magnetic fields as a means for increasing the strength of cement solutions and concrete. Nauch. trudy PermNII no.6:165-179 '64.
(MIRA 18:2)

S/734/61/000/000/001/003
1060/1260

AUTHOR: Poddubnyy, I.Ya., Mel'son, I.V., and Zdolotarova, R.V.
TITLE: Spectrophotometric method of determination of impurities of divinylacetylene in vinylacetylene
SOURCE: Leningrad. Vsesoyuznyy nauchno-issledovatel'skiy institut sinteticheskogo kauchuka. Fiziko-khimicheskiye metody analiza i issledovaniya produktov proizvodstva sinteticheskogo kauchuka. Leningrad, 1961. 73-87

TEXT: The purpose of this work was to develop a new, more sensitive method of detection of impurities of vinylacetylene, because the presence of even 0.05% of divinylacetylene affects the quality of synthetic rubber. The method used was that of spectrophotometric analysis in the ultraviolet region of the spectrum. Spectrophotometer C Φ -4 (SF-4) was used with quartz optical elements designed for work in the 220-1100 m μ region. Both divinylacetylene and vinylacetylene were analyzed as solutions in alcohol. The selected maximum was 265.6 m μ . It has been proved that other impurities present

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S/734/61/000/000/001/003
I060/I260

Spectrophotometric method...

in industrial vinylacetylene, such as acetylene, acetaldehyde, vinyl chloride and xylene do not interfere with the analysis, so that a binary mixture vinylacetylene-divinyl-acetylene can be used for research work. Thickness of the cuvettes used was such that the optical density of the solution varied between 0.3 and 0.7. These results follow strictly the Bouguer-Lambert-Beer law. The above described method has been checked in industrial conditions on a large number of samples with satisfactory results. There are 4 figures and 1 table.

Card 2/2

FOKINA, T. A.; ... EBANSKIY, A. I.; SOLOVYENKOVA, G. S.,
NELSON, ...

oligomers of styrene obtained in the presence of Friedel-Crafts
catalysts. Vysokom. speed. Chem. 9:946-47, My '65. (MIRA 12:9)

NEI'sm, K.V.

Raman spectrum and the polymerization process of isoprene. R. D. Cross and K. V. Nelson. *Journal of Polymer Science*, 1950, No. 3, pp. 417-424.

The Raman spectra were examined of the low polyene (dimer, trimer, tetramer, pentamer, and polymer, av. mol. wt. 800). The dimer has the characteristic (ν_{max}) of 1100, 1404, 1644, 1668, and 3071; the trimer of 105, 1400, 1640, 1662, 1671, and 3087; the tetramer of 110, 1408, 1637, 1660, and 3078; the pentamer of 1105, 1640, 1640, 1670, and 1680; and the polymer of 1102, 1637, 1660, 3071, and 3088. From analysis of the frequencies it was concluded that in the dimer and the trimer the double bond C=C is located at the ends and in the middle of the molecule. In the trimer, pentamer, and polymer the double bond is found preferentially at the ends of the chain. Further polymerization is favored by location of the C=C at the ends of the molecule. R. D. Cross.