

ACCESSION NR: AP4037572

it possible to obtain information on the real part of the elastic scattering cross section by investigating the interference between Coulomb and nuclear scattering. "We are pleased to thank V. I. Veksler and I. V. Chuvilo for continuous interest in the experiments." Orig. art. has: 1 figure and 4 formulas.

ASSOCIATION: Ob'yedinenny'y institut yaderny'kh issledovaniy (Joint Institute of Nuclear Research)

SUBMITTED: 13Dec63

DATE ACQ: 09Jun64

ENCL: 00

SUB CODE: NP

NR REF SOV: 003

OTHER: 001

Card 3/3

KIRILLOVA, L.F.; NIKITIN, V.A.; PANTUYEV, V.S.; SVIRIDOV, V.A.; STRUNOV, L.N.; KHACHATURYAN, M.N.; KHRISTOV, L.G.; SHAFRANOVA, M.G.; KORBEL, Z.; ROB,L.; DAMYANOV, S.; ZLATEVA, A.; ZLATANOV, Z.; YORDANOV, V. [Jordanov,V.]; KANAZIRSKI, Kh.; MARKOV, P.; TODOROV, T.; CHERNEV, Kh.; DALKHAZHAV, N.; TUVDENDORZH, D.

Elastic pp and pd-scattering at small angles in the energy range  
2 - 10 Bev. IAd. fiz. 1 no.3:533-539 Mr '65. (MIRA 18:5)

1. Ob'yedinennyi institut yadernykh issledovaniy. 2. Vyssheyte  
tekhnicheskoye uchilishche, Praga (for Korbel, Rob). 3. Fizicheskiy  
institut Bolgarskoy Akademii nauk, Sofiya (for Damyanov, Zlateva,  
Zlatanov, Yordanov, Kanazirski, Markov, Todorov, Chernev). 4. Institut  
khimii i fiziki, Ulan-Bator, Mongol'sakaya Narodnaya Respublika (for  
Dalkhazhav, Tuvdendorzh).

L 22122-66 EMT(1)

ACC NR: AP6004922

SOURCE CODE: UR/0056/66/050/001/0076/0077

38

3

AUTHOR: Kirillova, L. F.; Nikitin, V. A.; Sviridov, V. A.; Strunov, L. N.;  
Shafranova, M. G.; Korbel, Z.; Rob, L.; Zlateva, A.; Markov, P. K.; Todorov, T.;  
Khristov, L.; Chernev, Kh.; Dalkhazhav, N.; Tuvdendorzh, D.

ORG: Kirillova; Nikitin; Sviridov; Strunov; Shafranova / Joint Institute of  
Nuclear Research, Dubna (Ob'yedinenyyi institut yadernykh issledovaniy); /Korbel;  
Rob/ Czechoslovakian Higher Technical School, Prague (Chekhoslovatskoye Vyssheye  
tekhnicheskoye uchilishche); /Zlateva; Markov; Todorov; Khristov; Chernev/ Physics  
Institute, Bulgarian Academy of Sciences, Sofia (Fizicheskiy institut Bolgarskoy  
Akademii nauk); /Dalkhazhav; Tuvdendorzh/ Institute of Chemistry and Physics,  
Mongolian Academy of Sciences, Ulan-Bator (Institut khimii i fiziki Mongol'skoy  
Akademii nauk)

TITLE: Real part of the pp elastic scattering amplitude at 2, 4, 6, 8, and 10 Gev

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 50, no. 1, 1966,  
76-77

TOPIC TAGS: proton scattering, elastic scattering, scattering amplitude, differ-  
ential cross section, nuclear scattering

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L 22122-66

ACC NR: AP6004922

ABSTRACT: This is a continuation of earlier work by the authors (Phys. Lett. v. 13, 93, 1964) in which they present results of the measurements of the real part of the nuclear elastic scattering amplitude for an energy of 4 Gev, and more precise data for energies 2, 6, 8, and 10 Gev, taking into account the relativistic corrections. The experimental technique was described elsewhere (PTE no. 6, 18, 1963). The differential cross section was measured in the interval  $0.003 < |t| < 0.2$  ( $\text{Gev}/c^2$ ) ( $t$  = momentum transfer squared). The analysis of the obtained data as well as those reported by others was based on the Bethe formula (Ann. of Phys. v. 3, 190, 1958) with allowance for radiative corrections. The results agree well with the theoretical curve proposed by Soding (Phys. Lett. v. 8, 286, 1963), up to an energy of 20 Gev, above which some discrepancy appears. Orig. art. has: 1 figure and 2 formulas.

SUB CODE: 20/ SUBM DATE: 25Aug65/ ORIG REF: 001/ OTH REF: 008

Card 2/2 BK

LONINA, N.A.; SVIRIDOV, V.A.; TOLSOTV, K.D.; TSYGANOV, E.N.

Dependence of the registering properties of a nuclear emulsion on the  
temperature. Zhur. nauch. i prikl. fot. i kin. 2 no.1:13-14 Ja-F '57.  
(MIRA 10:3)

1. Elektrofizicheskaya laboratoriya Akademii nauk SSSR.  
(Photographic emulsions)

Sviridov, V.A.

120-6-30/36

AUTHORS: Otroshchenko, V.A., Sviridov, V.A., Tolstov, K.D.,  
and Shal'nikov, A.I.

TITLE: Solid Hydrogen Targets on the Surface of Photographic  
Emulsions (Tverdyye vodorodnyye misheni na poverkhnosti  
fotoemul'sii)

PERIODICAL: Pribory i Tekhnika Eksperimenta, 1957, No.6,  
pp. 110 - 111 (USSR).

ABSTRACT: It is difficult to study interactions between elementary particles and protons and deuterons which are included in nuclear emulsions because their number is small compared with the total number of nucleons bound in the nuclei of the emulsion. This is still true even when the emulsion is specially loaded with deuterium and hydrogen. To remove this difficulty, it is convenient to have a target of solid hydrogen or deuterium deposited directly on the surface of the emulsion. In this method of preparation of targets the temperature of the emulsion cannot be greater than 12 to 15 °K. Because of this, the temperature dependence of the sensitivity of NIKFI-R emulsions was investigated (Ref.1). Already at 20 °K, the sensitivity of emulsion is down by a factor of 2 and therefore it is difficult to use this emulsion with mini-Card1/2 mum ionisation particles. However, different types of

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SOV/77-4-6-5/16

(23.3000)

AUTHOR: Belyakov, V.A., Kozlova, L.G., Sviridov, V.A. Tolstov,  
K.D.

TITLE: Dependence of the Sensitivity of Nuclear Emulsions on  
Temperature Within the Range of 2-300° K

PERIODICAL: Zhurnal nauchnoy i prikladnoy fotografii i kinematografii  
1959, Vol 4, Nr 6, pp 427-429 (USSR)

ABSTRACT: The author reports on recent Soviet study of the dependence of the recording properties of various nuclear emulsions on temperature within the range of 2-300° K. The results of the first experiments were published in the paper of N.A. Dolina, V.A. Sviridov, K.D. Tolstov and E.N. Tsyanov [Ref 1]. Subsequently, an attempt was made to improve the recording properties of the emulsion NIKFI R 400 $\mu$  by a change in the processing conditions. Curve 1 of the graph (taken from the paper of V.A. Belyakov, L.G. Kozlova, V.A. Sviridov, K.D. Tolstov and E.N. Tsyanov [Ref 2]) corresponds to the normal processing conditions of emulsions, which with ✓

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SOV/77-4-6-5/16

Dependence of the Sensitivity of Nuclear Emulsions on Temperature  
Within the Range of 2-300° K

Table). The grain density at exposure within the range of 2-215° K averages 15-17 grains per  $100\mu$  of particle track. The fog is approximately constant. The layers were processed under conditions recommended by the firm of Ilford. Comparative data on NIKFI and Ilford emulsions are given in the graph. There are 1 graph, 1 microphotograph, 1 table and 4 references, 3 of which are Soviet and 1 English.

ASSOCIATION: Ob"yedinenyy institut yadernykh issledovaniy (Joint Institute of Nuclear Research)

SUBMITTED: September 23, 1957

Card 3/3

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85363

S/120/60/000/005/037/051  
 EO32/E314

Sensitivity and Thermal Conductivity of Nuclear Emulsions at Low Temperatures

at 0.1, 0.3, 1.6 and 300 °K. The results obtained are summarised in the following table:

Emulsion	Temperature, °K				Absolute sensitivity at 300 °K (blobs/100μ)
	300	1.6	0.3	0.1	
NIKFI-R	100%	$(36^{+15}_{-10})\%$	$(31^{+15}_{-10})\%$	$(21^{+15}_{-10})\%$	~ 60
Ilford G-5	100%	$(69 \pm 15)\%$	-	$(70 \pm 15)\%$	~ 25

The sensitivity at 300 °K was taken at 100%. Acknowledgments are expressed to P.L. Kapitsa for collaboration in this work.

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		5/056/60/015/004/006/048 2004/5010	94386
24-684	Balakirev, V. A., Van Shu-tep, Glazkov, V. V., Balkhantsev, E. I., Lebedev, R. M., Selznikov, N. S., Mitrofan, V. A., Petrov, V. A., Sviridov, V. A., Suk, N., Tolstoy, V. D.		X
TITLE:	Inelastic Interactions of 7 Bev $\pi$ -Mesons and Nucleons		X
PERIODICAL:	Zhurnal eksperimental'noi i teoricheskoy fiziki, 1960, Vol. 39, No. 4(10), pp. 397-397		X
TEXT:	The inelastic interaction of 7-Bev $\pi^+$ -mesons with nucleons is studied in this paper. The preliminary results were communicated to the Preprint Conference on High Energy (Kiev) Conference on Nucleon- $\pi$ Interaction. The emulsion chamber consisted of 240 layers (1.5 cm each). Layers with a thickness of 400-500 intersections with the nuclei or photoemulsion were observed. Of these, 515 interactions with charged particles were analyzed (Table 1). The angular distribution of charged particles was calculated by V. S. Sarsahanov. Statistics was eliminated by special measurements (Table 2). 459 pions and 134 protons	7	
CARD 1/3			
<p>were identified. The angular distribution of pions and the total distribution of all states (in c.m.s.) are shown in Fig. 1. For smaller number of charged particles, the asymmetry increases strongly. This is principally due to pions with large momenta (Fig. 2). Therefore, the angular distributions are very different for pions and for protons (Fig. 3): pions with momenta <math>&lt; 0.5</math> Bev show an almost isotropic distribution. From the angular and total distributions of protons (Fig. 4) it is seen that the protons conserve their initial direction. From the momenta distributions of pions and nucleons, the authors conclude that the average momentum of the nucleons and of the charged pions does not depend on the increase of the number of charged particles. The same result follows from the data for the average transverse momenta <math>\bar{p}_\perp</math> of protons and pions given in Table 3. Fig. 7 shows the number of neutral mesons as a function of the number of charged particles. The results can be interpreted only partly by the statistical theory. The asymmetry of the angular distribution of the secondary pions can only be explained by a peripheral collision of the pion with a pion of the nucleon shell (Figs. 6 and 9). An estimate of the radius of the nucleon core gave the</p>			
Card 2/3			
<p>maximum value of <math>4 \cdot 10^{-14}</math> cm. The authors summarise the results as follows: average momentum of protons <math>(0.69 \pm 0.04)</math> Bev/c, average transverse momentum <math>(0.57 \pm 0.01)</math> Bev/d, asymmetry of angular distributions of all pions <math>&gt; 1.36</math> GeV/c; pions with <math>p &gt; 0.5</math> Bev/c are emitted in the forward direction, their average momentum equals <math>(0.47 \pm 0.05)</math> Bev/c and agrees, therefore, with that of the protons. The authors thank D. I. Blokhintsev, and L. I. Petelin for discussion and advice. There are 9 figures, 1 table, and 23 references; 9 Soviet, 8 US, 1 British, 1 German, 4 Italian, 1 Japanese, and 1 Polish.</p>			
ASSOCIATION: Obrabotivayushchii Institut Yadernoy Issledovaniy (Joint Institute of Nuclear Research) SUBMITTED: May 11, 1960			
Card 3/3			

Sviridov, V. A.

32991  
S/641/61/000/000/018/033  
B108/B102

24.6500

AUTHORS: Mikhaylina, K. M., Nomofilov, A. A., Romanova, T. A.,  
Sviridov, V. A., Tikhomirov, F. A., Tolstov, K. D.

TITLE: Interaction of 14.1-Mev neutrons with Li<sup>6</sup> and Li<sup>7</sup>

SOURCE: Krupchitskiy, P. A., ed. Neytronnaya fizika; sbornik statey.  
Moscow, 1961, 249 - 257

TEXT: Interaction of 14.1-Mev neutrons with Li<sup>6</sup> and Li<sup>7</sup> nuclei was studied both with targets prepared from Ilford E<sub>1</sub> photoemulsions bearing the lithium and with targets of metallic lithium isotopes. The latter method was used for small angles of the departing particles. The mean number of Li nuclei in the photoemulsion was  $2.3 \cdot 10^{19} \text{ cm}^{-2}$ . The integral neutron flux striking the emulsion at right angles was about  $10^8 \text{ cm}^{-2}$ . Altogether, 412 events were recorded on a  $2.5 \text{ cm}^2$  area. 96 events were from the reaction  $\text{Li}^6(n,t)\alpha$  with a cross section  $\sigma = 27 \pm 6 \text{ mb}$ . Seven  $\text{Li}^6(n,p)\text{He}^6$  reactions with a cross section of about 5 mb were found, moreover

Card 1/2

*SVIRIDOV, V.A.*

NIKITIN, V. A., NOMOLOV, A. A., SVIRIDOV, V. A., SLEPETS, A. and STRUNOV, L. N.

"Differential Cross Section of the Elastic  $\Lambda^-$ - $p$ -Scattering of Mesons with  
the Momentum 3,8 Gev/C on Small Angles and Inelastic  $\Lambda^-$ - $p$ -Scattering with a  
Small Momentum Transfer"

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

Joint Institute For Nuclear Research  
Laboratory of High Energies, Dubna, 1962

KIRILLOVA, L.F.; NIKITIN, V.A.; NOMOFILOV, A.A.; SVIRIDOV, V.A.;  
STRUNOV, L.N.; SHAFRANOVA, M.G.

Elastic scattering of protons at small angles at energies of  
6 and 10 Gev. Zhur. eksp. i teor. fiz. 45 no.4:1261-1266 O  
'63. (MIRA 16:11)

1. Ob'yedinenyyi institut yadernykh issledovaniy.

BFRZHNOY, A.I.; SVIRIDOV, V.A.; KULAGIN, P.G.

Investigating the antifoaming properties of polyorganosiloxane  
compounds used for drilling fluids. Izv. vys. ucheb. zav.;  
neft' i gaz 7 no.3:25-30 '64. (MIRA 17:6)

1. Khar'kovskiy gosudarstvennyy universitet i UkrVNIIgaz.

ACCESSION NR: AP4019254

one of their experiments (International Conference on High-Energy Physics, CERN, 1962). Stacks of polyethylene film and of films of a copolymer of ethylene with propylene, 0.2 to 20 mg/cm<sup>2</sup> thick, were irradiated by the internal proton beam of the proton synchrotron at 9 GeV. The percentage loss due to diffusion was measured with a 95 mg/cm<sup>2</sup> polystyrene scintillator. The diffusion losses obtained under different exposures ranged from 9 to 14% with an average of  $11.8 \pm 1\%$ . These losses were found to be independent, over a wide energy range, of both radiation intensity and energy or character of irradiating particles. "The authors are grateful to M. Shafranov and L. Strunov for help and useful discussions."

ASSOCIATION: Ob"yedinenny\*y institut yaderny\*kh issledovaniy  
(Joint Institute of Nuclear Research)

SUBMITTED: 03Oct63

DATE ACQ: 27Mar64

ENCL: 00

SUB CODE: PH

NO REF SOV: 001

OTHER: 004

Card 2/2

L 42988-65 E.T(1)/E.T(m)/T/EWA(h) Pz-6/Peb IJP(c) A:

ACCESSION NR: AP5006536

S/0056/A5/048/002/0767/0769

AUTHOR: Akimov, Yu. K.; Kalinin, A. I.; Nikitin, V. A.; Pantuyev, V. S.

TOPIC TAGS: proton scattering, high energy proton scattering, proton semiconductor counter

ABSTRACT: The possibility of studying high energy proton elastic scattering in the

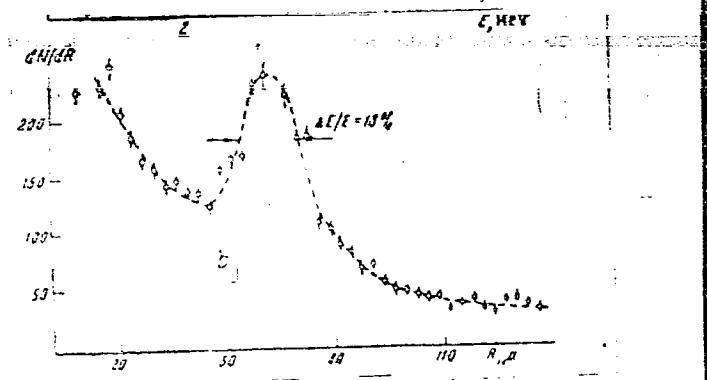
conductance of the synchrophasotron was investigated. The experiments were conducted on the synchrophasotron at the Joint Institute of Nuclear Investigations.

mined basically by Coulomb scattering or proton scattering. The test geometry. For comparison (case b), the distribution of particles emitted from the same light source, scattered along mean free paths in a 25% photographic emulsion, is given. The peak for elastically scattered protons has a smaller radius than the one obtained with water scattering and is located at a larger angle. The radius of the peak is 1.5 cm and the angle is 10 degrees.

APR 1967

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WITH A SEMICONDUCTOR  
distribution by mean free paths in a 25%  
diluted gelatin photoemulsion



Card 3/3

RIDEL', E.I., kand. tekhn. nauk; SVIRIDOV, V.A., inzh.; SHCHEPETIL'NIKOV,  
V.A., doktor tekhn. nauk

Automatic hook designed at the Moscow Institute of Railroad  
Engineers, Mekh. i avtom. proizv. 19 no.8:29 Ag '65.  
(MIRA 18:9)

BEREZHOV, A.I.; KULAGIN, P.G.; SVIRIDOV, V.A.; LEVCHENKOV, A.T.; TITARENKO, N.  
Kh.

Foam damper on an organosilicone base for clay muds. Burenie  
no. 3:16-17 '64. (MIRA 18:5)

1. Ukrainskiy filial Vsesoyuznogo nauchno-issledovatel'skogo  
instituta prirodnogo gaza i trest "Poltavaneftegazrazvedka".

SOV/128-59-5-11/35

18(5)

AUTHOR: Sviridov, V.G., Engineer  
TITLE: Minor Mechanization in the Foundry Shops of the Urals  
Automobile Plant  
PERIODICAL: Liteynoye Proizvodstvo, 1959, Nr 5, pp 21-23 (USSR)

ABSTRACT: This article has been published in the periodical "Tekhnologiya Avtomobilostroyeniya 1959 Nr 1 (19)", (The Technology of Auto Engineering). In recent years the output of gray cast iron could be increased by 15% and the output of malleable cast iron by 20%. The mechanization is mainly applied to the transportation of sand, molds, and other parts by conveyor, as well as to an automatic loading and unloading device. The change to mechanization has been done by the laborers of the plant themselves by overtime and on Sundays. Fig. (1) shows an equipment operated by compressed air for taking finished parts into the conveyor. Fig. (2) shows an equipment for lifting parts up and down. By Fig. (3) an equipment for transportation of molding sand to mold making machines is shown. Figs. (4) and

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SOV/128-59-5-11/35

Minor Mechanization in the Foundry Shops of the Urals Automobile Plant.

(5) show the conveyer device for the transportation of molds. Fig. (6) gives an illustration of a device for the elimination of small iron pieces out of the molding sand by magnets. Fig. (7) shows a continuous device for taking heavy loads up and down, e.g. iron frames, molds, etc. There are 7 diagrams

Card 2/2

SVIRIDOV, V.G.

Sandblast apparatus for making cores. Biul.tekh.-ekon.  
(MIRA 13:6)  
inform. no.2:11-12 '60.  
(Sandblast) (Coremaking)

SHUL'GA, M.S. (g. Chernovtsy); SIDORYCHEVA, A.G.; SVIRIDOV, V.I.  
(Rostov-na-Donu); SHEKHTERMAN, M.E. (g. Tiraspol');  
ZHIGALOV, K.S. (pos. Bilimbay Sverdlovskoy oblasti); SERYAKOV, A.A.  
(Murom); SAKEVICH, N.M. (Vitebsk); KAZANTSEV, I.I.

Readers suggestions. Fiz. v shkole 21 no.6:80-81 N-D '61.  
(MIRA 14:12)

1. Turochakskaya srednyaya shkola Gorno-Altayskoy avtonomnoy  
oblasti (for Kazantsev).  
(Physics--Experiments)

SVIRIDOV, V.I.

~~Class physics experiments in eight-year schools. Fiz. v shkole~~  
23 no.4:58-65 Jl-Ag '63. (MIRA 17:1)

1. 53-ya shkola, Rostov-na-Donu.

SVIRIDOV, V.M., aspirant.

Efficiency of using interblock station graphic train sheets for  
increasing sectional speed on single-track lines. Trudy MTB no.7:  
240-267 '57. (MIRA 11:5)  
(Railroads--Traffic)

SVIRIDOV, V.M., Cand Tech Sci -- (diss) "Tracks for  
increasing divisional speed of movement of freight  
trains on single-track railroad lines." Mos 1958  
<sup>Min of Railways</sup>  
18 pp. (~~Mos~~ USSR. Mos Transport Economics Inst) 150 copies  
(KL, 39-58, 110)

- 44 -

MAKAROVICHIN, Andrey Mikhaylovich; SVIRIDOV, Viktor Mikhaylovich;  
TIKHONOV, Konstantin Kuz'mich; ZABELLO, M.L., kand.tekhn.  
nauk, red.; KHITROVA, N.A., tekhn.red.

[Resources for improving the operations of railroad divisions]  
Rezervy uluchsheniia ekspluatatsii nnoi raboty otdeleniia  
dorogi. Moskva, Vses.izdatel'sko-poligr.ob"edinenie M-va putei  
soobshcheniia, 1960. 63 p. (MIRA 13:6)  
(Railroads--Management)

SITNIK, M.D., kand.tekhn.nauk; SVIRIDOV, V.M., kand.tekhn.nauk AIKUTSIONEK,  
R.A., inzh.

Determining the efficiency of freight transportation in multiple-  
destination and technological routing. Trudy MIFT no.127:61-308  
'61. (MIRA 18:3)

SVIRIDOV, V.M.

Lining of cast stone. TSement 27 no. 2:25-26 Mr-Ap '61.  
(MIRA 14:5)

1. Podol'skiy tsementnyy zavod.  
(Kilns, Rotary) (Stone, Cast)

VALYUKOV, E.A.; SVIRIDOV, V.M.

Semiautomatic control of cement loading operations. TSegment 27  
(MIRA 14:8)  
no.4:26 Jl-Ag '61.

1. Podol'skiy tsementnyy zavod.  
(Cement--Storage) (Loading and unloading)

KOVALEV, Ye.S.; SVIRIDOV, V.M.

Lengthening the operating period of a kiln between relinings.  
TSement 27 no.6:13 N-D '61. (MIRA 15:3)  
(Kilns, Rotary)

SVIRIDOV, V.M., inzh.

Improvement of the operation of dust-collecting devices.  
TSement 31 no.4:16 Jl-Ag '65. (MIRA 18:8)

1. Podol'skiy tsementnyy zavod.

L 44364-66 EWT(d)/EWP(c)/EWP(k)/T/EWP(v)/EWP(1) LJP(c)  
ACC NR: AP6021385 (A) SOURCE CODE: UR/0101/66/000/002/0020/0021  
S6B

AUTHOR: Yamshchikov, V. S. (Candidate of technical sciences); Levushkin, L. N. (Engineer); Bondarenko, V. G. (Engineer); Sviridov, V. M. (Engineer)

ORG: Moscow Institute of Radioelectronics and Mining Electromechanics (Moskovskiy institut radioelektroniki i gornoj elektromekhaniki); Podol'sk Cement Plant (Podol'skiy tsementnyy zavod)

TITLE: The use of ultrasonic waves in the quality control of carbonate rocks  
14

SOURCE: Tsement, no. 2, 1966, 20-21

TOPIC TAGS: cement, sonic wave propagation carbonate, quality control, ultra-

ABSTRACT: The feasibility of applying ultrasonic wave propagation for quality control of carbonate rocks to be used in the cement industry was investigated. A correlation between the mineral composition of the carbonate rocks and the rate of ultrasonic wave propagation was established. Maximum wave propagation of 2500 m/sec corresponds to dolomite-free rocks. For rocks containing from 0 to 16-20% dolomite, the ultrasonic wave propagation is 2500-2000 m/sec. The accuracy of the determination of the carbonate rock composition by the ultrasonic wave propagation technique is ±2%. Be-

UDC: 666.94.022 : 620.179.16

Card 1/2

L 44364-66

ACC NR: AP6021385

cause of the high degree of accuracy and simplicity, the ultrasonic wave propagation method is recommended for use by the cement industry. Orig. art. has: 1 table.

SUB CODE: 08,20,11 / SUBM DATE: none/ ORIG REF: 003

Card 2/2 hs

TONKOSHKUROV, B.A.; ASATURYAN, A.Sh.; SVIRIDOV, V.P.

Electric heating of viscous petroleums and petroleum products.  
Neft. khoz. 38 no.11:46-49 N '60. (MIRA 14:4)  
(Tank cars) (Electric heating)

TONKOSHKUROV, B.A., ASATURYAN, A.Sh.; SVIRIDOV, V.P.

Methods for calculating electrical heaters. Trudy NIITransneft'  
no.1:50-56 '61. (MIRA 16:5)  
(Petroleum, Heating of)

SVIRIDOV, V.P.; BOLDOV, N.G.

Heating highly viscous fluids in tank cars. Trudy NIItransneft!  
no.1:57-72 '61. (MIRA 16:5)  
(Petroleum, Heating of)

SVIRIDOV, V.P.; PETROVA, L.N.

Determining optimum parameters in the vibrational heating of  
petroleum products in tanks. Trudy NIITransneft' no.1:73-82  
'61. (MIRA 16:5)  
(Petroleum, Heating of)

ASATURYAN, A.Sh.; SVIRIDOV, V.P.; BOLDOV, N.G.

An analogy of internal and external problems of hydrodynamics. Trudy  
NIITransneft' no.1:83-91 '61. (MIRA 16:5)  
(Petroleum pipelines—Fluid dynamics)

ASATURYAN, A.Sh.; SVIRIDOV, V.P.; BOLDOV, N.G.

Flow of imperfect liquids in conical pipes and nozzles. Neft.  
khoz. 39 no.2:60-64 F '61. (MIRA 17:2)

TONKOSHKUROV, B.A.; CHERNIKIN, V.I.; SVIRIDOV, V.P.

Design of heat exchangers for viscous petroleum products. Transp.  
i khran.nefti no.6:18-23 '63. (MIRA 17:3)

1. Nauchno-issledovatel'skiy institut po transportu i khraneniyu  
nefti i nefteproduktov i Moskovskiy institut neftekhimicheskoy i  
gazovoy promyshlennosti im. akademika Gubkina.

ISUPOV, Ya.G.; SVIRIDOV, V.P.

Device for discharging petroleum products from the lower part  
of tank cars. Transp. i khran. nefti i nefteprod. no. 1:33-34  
'64. ~~17:5~~ (MIRA 17:5)

1. Nauchno-issledovatel'skiy institut po transportu i khraneniyu  
nefti i nefteproduktov.

SVIRIDOV, V.P.; GUBLIN, V.Ye.

Optimal parameters of the electric heating of petroleum products in  
tank cars. Izv. vys. ucheb. zav.; neft' i gaz 7 no.2:85-89 '64.  
(MIRA 17:10)

1. Ufimskiy neftyanoy institut.

SVIRIDOV, V.P.; ISUPOV, Yu.G.; SKOVORODNIKOV, Yu.A.; YURTAYEV, V.G.

Device for heating high-viscosity petroleum products in tank cars.  
Transp. i khran. nefti i nefteprod. no.9:20-22 '64. (MIRA 17:10)

1. Nauchno-issledovatel'skiy institut po transportu i khraneniyu  
nefti i nefteproduktov.

YABLONSKIY, V.S. [deceased]; SVIRIDOV, V.P.

Determining the optimal parameters when heating mazut in tank cars. Trudy NIITransbeft' no.3:94-103 '64.

(MIRA 18:2)

PETROVA, L.N.; SVIRIDOV, V.P.

Mean temperature of petroleum products. Trudy NIITransneft' no.3:  
104-106 '64.  
(MIRA 18:2)

YABLONSKIY, V.S. [deceased]; SVIRIDOV, V.P.; TONKOSHKUROV, B.A.

Determining the heat transfer and the power of the drive of heaters  
with mixers. Trudy NIITransneft' no.3:70-76 '64.

(MIRA 18:2)

YEDIGAROV, S.G.; SVIRIDOV, V.P.; BOLDOV, N.G.

Pouring mazut form tank cars with car dumpers. Trudy NIITransneft'  
(MIRA 18:2)  
no.3:77-83 '64.

YABLONSKIY, V.S. [deceased]; SVIRIDOV, V.P.; MUHAMEDZYANOV, Sh.S.

Curved trajectories of free flooded streams. Trudy NIITransneft'  
no.3:84-93 '64.  
(MIRA 18:2)

PETROVA, L.N.; SVIRIDOV, V.P.; TONKOSHKUROV, B.A.

Calculating the temperature of a cooling petroleum product in  
tank cars. Trudy NIITransneft' no.3:114-117 '64.  
(MIRA 18:2)

22231  
S/093/61/000/002/002/003  
A051/A129

26.2144

AUTHORS: Asaturyan, A. Sh.; Sviridov, V. P., and Boldov, N. G.

TITLE: The motion of a real liquid in conical tubes and nozzles

PERIODICAL: Neftyanye Khozyaystvo, no. 2, 1961, 60-64

TEXT: The authors have applied the method of similarity and dimensions (Ref. 7) for investigating the motion of viscous liquids in tubes of varying cross-sections as opposed to Bernoulli's equation of continuity:  $Q = \mu F \sqrt{2gH_2}$  (1), where  $\mu$  is the discharge coefficient,  $F$  the cross section area,  $F = \frac{\pi d^2}{4}$ ,  $g$  the gravity acceleration,  $H$  the pressure under which the liquid flows. The difficulty in using the latter equation is said to be the correct determination of  $\mu$ ; an analysis of the obtained experimental data in this work showed, however, that formula (1) can be used for a viscous liquid flowing through conical tubes, where the discharge coefficient  $\mu$  is a function of the Reynolds number  $R$ . The latter relationship was derived by the authors in assuming that the created motion of the viscous liquid in the horizontal conical tube in each cross-section is determined by the interaction of forces of inertia, pressure and internal friction. These forces are characterized by the following parameters:  $Q$ ,  $\Delta P$ ,  $\theta$ ,  $v$ ,  $d$ .

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X

22231

S/093/61/000/002/002/003  
A051/A129

The motion of a real liquid ...

$\alpha$ , L, where  $\Delta P$  is the pressure difference between the two cross-sections investigated, in  $\text{kg/cm}^2$ ,  $\rho$  the liquid density in  $\text{kg sec}^2/\text{cm}^4$ ,  $\nu$  the coefficient of kinematic viscosity in  $\text{cm}^2/\text{sec}$ ,  $\alpha$  the angle of taper in radians, L the length of the cone in cm. Considering that all the main acting factors are taken into account the connection equation in non-dimensional values is expressed as:

$$F \left( \frac{4Q}{\pi \sqrt{2gH} d^2} \right); \quad \frac{\sqrt{2gH} d}{L}; \quad \alpha; \quad \frac{d}{L} = 0. \quad (2)$$

The combination  $\frac{4Q}{\pi \sqrt{2gH} d^2}$  suggested by Al'tshul' is the Reynolds number. Solving equation (2) with respect to the discharge coefficient  $\mu$ , the authors derive:

$$\mu = \frac{4Q}{\pi \sqrt{2gH} d^2} = f(R, \alpha, \frac{d}{L}) \quad (3)$$

which shows that  $\mu$  is really a function of R, angle of taper and ratio  $\frac{d}{L}$ , as stated above. It is further shown that a connection exists between  $\mu$  and the resistance coefficient (Euler's parameter E):  $\mu = \frac{1}{\sqrt{E}}$  (4);

where  $E = \frac{2gH}{v^2}$ , v being the average velocity in a narrow cross-section.  $\mu$  characterizes the resistance of the opening to the motion of the liquid depending on R.  $\mu$  can be determined experimentally only. Fig. 1 is a diagram of the experimental set-up to determine the functional relationship of equation (3).

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22231  
S/093/61/000/002/002/003/  
A051/A129

The motion of a real liquid ...

The apparatus consists of a tank 1 creating pressure along 10 m. The liquid from tank 1 enters the measuring capacity 7 passing through the pipeline 2, through the nozzle 6. The liquid discharge was regulated by tap 4. The pressure change during the motion of the viscous liquid in the conical tubes was measured in cross-sections A and B, using a sensitive two-liquid manometer 9. Fig. 2 is a graph showing the characteristic features of the motion of the viscous liquid in the conical tubes. In the interval  $3 \cdot 10^3 \leq R \leq 2 \cdot 10^5$  the function  $\mu$  hardly depends on  $R$ . In the interval  $10 \leq R \leq 3 \cdot 10^3$   $\mu$  does not depend on the angle of taper at all. At  $10 \leq R \leq 300$  the liquid flow in the conical nozzles is laminated, but no strictly linear law of this flow is observed, just as in the cylindrical tubes. A comparison of the data obtained by the authors with those of Al'tshul (Refs. 4, 9) and theoretical calculations made by Wuest (Ref. 10) showed that no linear relationship of the type  $\mu = AR$  (5) results from equation (3) in the same interval ( $10 \leq R \leq 300$ ) of  $R$ . Results obtained from calculations made with equation (5) by other authors did not correspond to the experimental data obtained in this work. This discrepancy is explained by the fact that a conical tube of varying cross-sections shows much greater resistances to the liquid flow than round apertures in a thin wall do. A transfer from the laminar to the turbulent movement is noted at the critical value of  $R$ :  $R_k = 300 \pm 330$ . In the interval

Card 3/74

X

SVIRIDOV, V.T.

256F71

USSR/Electronics - Radio Relay                    Sep/Oct 52  
Lines

"Survey of Foreign Literature: The Use of Deci-meter and Centimeter Radio Relay Lines in the Telemechanical Installations of Large Power System Combines," R.G. Mirimanov and V.T. Sviridov

Avtomat i Telemekh, Vol 13, No 5, pp 592-610

Survey of radio relay lines, including a general discussion of such lines and descriptions of several US lines, namely the Boston-New York line, the transcontinental line, and the Bonneville Power System line. Lists 14 US sources.

256F71

SVIRIDOV, V.T.

MIRIMANOV, R.G.; SVIRIDOV, V.T.

Review of foreign literature on the use of microwave radio relays  
in remote-control units of high-power pool systems. Avtom. i telem.  
14 no.1:59-87 Ja-F '53. (MLRA 10:3)

(Remote control) (Microwaves)  
(Electric power distribution)

SOV/109-3-7-17/23

AUTHORS: Kislov, V. Ya., Sviridov, V. T., Chetkin, M. V.

TITLE: A Non-Slowed Wave in the System Consisting of a Coaxial Helix and a Centre Conductor (Nezamedlennaya volna v sisteme koaksial'no raspolozhennykh spirali i tsentral'nogo provodnika)

PERIODICAL: Radiotekhnika i elektronika, 1958, Vol 3, Nr 7,  
pp 964-966 (USSR)

ABSTRACT: The radius of the helix is  $a$  and its winding angle is  $\phi$ . The radius of the centre conductor is  $c$ . It is assumed that the helix satisfies the usual boundary conditions, while the boundary conditions for the centre conductor are expressed by Eqs.(2) and (3), where  $\mu_1$  is the permeability of the centre rod,  $\sigma$  is its conductivity and  $\omega$  is the angular frequency. By employing the above boundary conditions the dispersion equation of the system is in the form of Eq.(4), where  $I_0, \dots, K_1$  are the modified Bessel functions;  $k$  is the wave number,  $\beta$  is the propagation constant, and  $\epsilon$  and  $\mu$  are the permittivity and permeability of free space. If  $\gamma_a \ll 1$  and  $\gamma_c \ll 1$ , Eq.(4) can be written as Eq.(5), which can further be simplified and written as Eq.(6). If the solution of Eq.(6) is in the form of Eq.(7), the perturbation  $X$  is

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SOV/109-3-7-17/23

A Non-Slowed Wave in the System Consisting of a Coaxial Helix and a Centre Conductor

expressed by Eq.(9). From Eq.(9) it is seen that  $\operatorname{ctg} \phi$  should be greater than 1, which is normally fulfilled in a practical helix. From this it is concluded that in the helix-centre conductor system it is possible to obtain non-slowed waves having a low attenuation; this results in the appearance of a parasitic feedback between the input and the output of the tube. The paper contains 4 Soviet references.

SUBMITTED: January 17, 1958.

1. Electromagnetic waves--Mathematical analysis

Card 2/2

6(7)

PHASE I BOOK EXPLOITATION

SOV/3274

Sviridov, Vladimir Timofeyevich

Radioreleynyye lini i svyazi (Radio Relay Communications Systems) Moscow,  
Gos. izd-vo fiziko-matem. lit-ry, 1959. 78 p. (Series: Nauchno-populyarnaya  
biblioteka) 35,000 copies printed.

Ed.: A.I. Kostiyenko; Tech. Ed.: S.S. Gavrilov.

PURPOSE: The booklet is intended for the general reader.

COVERAGE: The author briefly describes the development of radio relay systems  
in the Soviet Union and in other countries. He outlines the principles of  
multichannel transmission, describes the construction and operation of radio  
relay systems and presents examples of their application in communications,  
television, power systems, and other areas. No personalities are mentioned.  
There are no references.

TABLE OF CONTENTS:

Introduction

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Card 1/2

IZYUMOVA, Tamara Ivanovna; SVIRIDOV, Vladimir Timofeyevich; KUZNETSOV, V.A.,  
red.; LARIONOV, G.Ye., tekhn.red.

[Hollow and ribbon wave guides.] Polye i lentochnye radiovolnovody.  
Moskva, Gos.energ.izd-vo, 1960. 95 p. (Massovaia radiobiblioteka,  
no.379). (MIRA 14:3)

(Wave guides)

ACCESSION NR: AP4009980

S/0109/64/009/001/0101/0107

AUTHOR: Sviridov, V. T.

TITLE: Propagation of surface and waveguide TM-modes between a "metallic" and a "dielectric" impedance plane

SOURCE: Radiotekhnika i elektronika, v. 9, no. 1, 1964, 101-107

TOPIC TAGS: TM mode, TM mode propagation, TM mode propagation theory, SHF electron device, SHF device delay, SHF device delay structure

ABSTRACT: A mathematical study of a two-impedance-plane model imitating a part of an SHF electron device with a complicated delay structure is presented. In such a device, along with delayed modes interacting with an electron beam, other modes can propagate which tends to impair the fundamental parameters of the device and to limit the field of its application. The following practical conclusions are drawn: (1) In a coaxial-helix-and-central-conductor structure surrounded by an absorbing dielectric, the surface wave about the central conductor cannot propagate if  $r$  equals several tens cm; (2) With  $r < 1$  or 1.5 cm, at the 10-cm band, only one fast mode -- a surface wave at the inside of the

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ACCESSION NR: AP4009980

boundary of the dielectric — can propagate between the dielectric and the central conductor; characteristics of this mode are independent of the central-conductor impedance which substantially facilitates their theoretical analysis; (3) In the most interesting practical cases, when an absorbing dielectric surrounds the helix-central-conductor set, the problem can be reduced to selecting the material and thickness of the dielectric which would ensure effective absorption of the surface mode propagating on the inside. "In conclusion, the author wishes to thank B. Z. Katselenbaum for his valuable advice and discussion of the results."  
Orig. art. has: 2 figures and 15 formulas.

ASSOCIATION: none

SUBMITTED: 14Dec62

DATE ACQ: 10Feb64

ENCL: 00

SUB CODE: CO-111

NO REF SOV: 001

OTHER: 000

Card 2/2

REF ID: A654130010-0  
171001/SEC-B/EMP(t)/EMP(b)/EMA(h) PM-4/PAC-4/PAB/11-17/

171001/0001

1/6  
B

AUTHOR: Sviridov, V. T.

WEATHER: overcast window, class 21, No. 171001

TEMPERATURE: extremely cold, -10°C, wind blowing, heavy snowing, absorbing

sunlight, visibility 10 m, earth and snow covered with thick layer of snow, reflecting the

Card 1/3

"APPROVED FOR RELEASE: 08/31/2001

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NO DEF SOV: 000

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L 20951-65

Plastic - X-rayed - 100% visible

- Ceramic tiles. 0 - dielectric  
insulators. 0 - conductors.

Card 3.3

APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001654130010-0"

SVIRIDOV, V.V.

New data on diabases in the northwestern Caucasus. Iss. vys. ucheb.  
zav.; geol. i razv. 2 no.1:52-59 Ja '59. (MIRA 12:10)

1.Rostovskiy gosudarstvennyy universitet.  
(Caucasus, Northern--Diabase)

BARANOV, I.Ya.; SVIRIDOV, V.V.

Intrusive rocks in the Urup copper-pyrite deposits in the north-western Caucasus. Izv.vys.ucheb.zav.; geol.i razv. 2 no.8:  
83-89 Ag '59. (MIRA 13:4)

1. Rostovskiy-na-Donu gosudarstvennyy universitet.  
(Urup region (Caucasus, Northern)--Chalcopyrite)

3(5)

SOV/11-59-8-5/17

AUTHOR: Sviridov, V.V.

TITLE: New Data on Granitoids of the Main Mountain Ridge of  
the North-Western Caucasus

PERIODICAL: Izvestiya Akademii nauk SSSR, Seriya geologicheskaya,  
1959, Nr 8, pp 50 - 66 (USSR)

ABSTRACT: This is a detailed description of granitoids located  
in the zone of the Main Mountain Ridge of the North-  
Western Caucasus: the Upper-Urushten massif in the  
basin of tributaries of the upper part of the Urush-  
ten, Sinyaya and Imeretinka rivers; the Pereval'naya  
subzone situated to the south of the Upper-Urushten  
massif (granitoids of the Dzitaku, Pseashkha and Pere-  
val'naya mountains) and large dioritic gneiss and  
gabbro-gneiss blocks in the upper parts of the Kishi  
and Laura rivers. Brief information on the petrogra-  
phy of the zone has previously been given I.Ya. Bara-  
nov, L.A. Vardanyants, A.G. Kobylev and G.D. Afanas'-  
yev. The tectonic structure of the Upper-Urushten

Card 1/4

SOV/11-59-8-5/17

New Data on Granitoids of the Main Mountain Ridge of the North-Western Caucasus

massif is very complicated. The massif is composed mainly of microclinic granites with inclusions of quartz diorites, biotitic granodiorites and orthoclase granites. The author considers these inclusions as the youngest formations of the massif. Similar formations in other eastern regions were also considered by I.I. Bessonov, I.A. Baranov and G.R. Chkhouta as the youngest Hercynian intrusions of the Main Mountain Ridge. The complicated structure of the massif is explained, according to the author, by its multiphase formation. The author divides all granitoids of the Pereval'naya subzone into 2 large groups. The first group is composed of plagioclase granites with albite and quartz-plagioclase granites, granodiorites, tonalites and leucocratic granites. Granitoids of this group are similar to those of the Urushten Massif described by G.D. Afanas'yev formed in the Lower Paleozoic Period. The second group is composed of microclinic granites and granodiorites.

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SOW/11-59-8-5/17

New Data on Granitoids of the Main Mountain Ridge of the North-Western Caucasus

As the Lower Carboniferous formations were metamorphized by these intruding rocks, the age of this group can be fixed as that of the Middle-Paleozoic period. Dioritic gneisses and gabbro-gneisses of the upper parts of the Kishi river are metamorphized to such an extent that they no longer contain any remains of eruptive rocks and form normal amphibolic gneisses and amphibolites. Gneisses of the upper part of the Laura river are metamorphized only in their deeper parts, their central parts still preserve the characteristic of slightly metamorphized rocks. Chemical composition and characteristics of all of the above mentioned granitoids and gneisses and their quantitative-mineralogical composition are given in tables 1, 2, 4. Analyses were made by V. Podol'skaya in the chemical laboratory of the Severo-Kavkazskoye geologicheskoye upravleniye (North-Caucasian Geological Administration). Main chemical characteristics of granitoids and gneisses of the zone of the Main

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SOV/11-59-8-5/17

New Data Granitoids of the Main Mountain Ridge of the North-Western Caucasus

Mountain Ridge, as determined by A.N. Zavaritskiy, are given in table 3. Optic constants of potassium - soda feldspars from the granitoids of the Upper-Urushten Massif and the Pereval'naya subzone are given in table 5. There are 5 tables, 2 maps and 9 Soviet references.

ASSOCIATION: Rostovskiy na Donu gosudarstvenny universitet (The Rostov-na-Donu State University)

SUBMITTED: April 16, 1958

Card 4/4

BARANOV, I.Ya.; SVIRIDOV, V.V.

Dikes and copper-pyrite ore formation in the Urupskiy deposit of the Northern Caucasus. Izv. vys. ucheb. zav.; geol. i razv. 3 no.5:98-100 My '60. (MIRA 13:11)

1. Rostovskiy-na-Donu gosudarstvennyy universitet.  
(Urupskiy region--Copper ores)  
(Urupskiy region--Pyrites)

SVIRIDOV, V.V.

Concerning R.P. Tuzikov's article "Genetic characteristics of  
Urup pyrite deposits (Northern Caucasus)." Izv. AN SSSR. Ser.  
geol. 25 no. 3:110-112 Mr '60. (MIRA 13:12)  
(Urup Valley--Pyrites)

SVIRIDOV, V. V., Cand. Geol-Mineral. Sci.. (diss) "Petrography  
of Enclosed Rocks of Urupskiy Copper Pyrite Deposits in Northern  
Caucasus," Rostov-on-Don, 1961, 24 pp (Rostov State Univ., Voronezh State Univ.) 200 copies (KL Supp 12-61, 259).

SVIRIDOV, V.V.

Remarks on the article at V.I.Smirnov and T.IA.Goncharova  
"Geologic characteristics of the formation of pyrite deposits  
in the western part of the Northern Caucasus." Izv.AN SSSR.Ser.  
geol. no.3:110-111 Mr '61. (MIRA 15:2)  
(Caucasus, Northern—Pyrites)  
(Smirnov, V.I.) (Goncharova T.IA.)

AFANAS'YEV, G.D.; LUPANOVA, N.P.; SVIRIDOV, V.V.

On the Devonian age of phyllitic slates of the Urup River Basin  
(Northern Caucasus). Dokl. AN SSSR 148 no.2:397-399 Ja '63.  
(MIRA 16:2)

1. Institut geologii rudnykh mestorozhdeniy petrografii, minera-  
logii i geokhimii AN SSSR. 2. Chlen-korrespondent AN SSSR (for  
Afanas'yev).  
(Urup Valley--Phyllite)

L 37092-66 EWT(1) IJF(c)

ACC NR: AP6017592

SOURCE CODE: UR/0250/66/010/001/0011/0014

30

B

AUTHOR: Potapovich, A. K.; Sviridov, V. V.; Makatun, V. N.; Branitskiy, G. A.

ORG: Institute of Physics, AN BSSR (Institut fiziki AN BSSR); Belorussian State University im. V. I. Lenin (Belorusskiy gosudarstvennyy universitet)

TITLE: Paramagnetic centers in irradiated silver oxalate

SOURCE: AN BSSR. Doklady, v. 10, no. 1, 1966, 11-14

TOPIC TAGS: silver compound, electron paramagnetic resonance, epr spectrum, ~~radioactivity~~, hyperfine structure, paramagnetic ion, POLYCRYSTAL, GAMMA IRRADIATION

ABSTRACT: To compare the character of formation of paramagnetic centers under the influence of ionizing radiation and ultraviolet light, the authors have investigated the EPR spectra in irradiated polycrystalline silver oxalate. This material was chosen because it is capable of deep photolysis and radiolysis with formation of metallic silver. To illuminate the influence of random impurities, some 30 specimens were tested. These were prepared by different methods, precipitation from aqueous solutions of silver sulfite in oxalic acid, precipitation from solutions of silver nitrate with oxalic acid, and preparation from ammonia solutions. The irradiation was at room temperature with mercury-quartz lamps and with  $\gamma$  rays from  $\text{Co}^{60}$  (72 r/sec). The EPR spectra were measured with a radio spectrometer having a sensitivity  $10^{-11}$  mole of DPPH. No sample gave EPR signals prior to irradiation, but EPR signals appeared in all samples after irradiation with both  $\gamma$  rays and ultraviolet. The signals disappeared only when the samples were heated above 100C. Three different types of signals

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L 37092-66

ACC NR: AP6017592

were observed. One consisting of five unequal lines, the other a single symmetrical line, and the third a single asymmetrical line with superimposed fine structure. The first signal can be explained by attributing it to a paramagnetic center that produces a hyperfine structure from three nonequivalent silver ions. The nature of the second signal is not perfectly clear, and the third signal can be attributed to impurities. This report was presented by AN BSSR Academician A. N. Sevchenko. Orig. art. has: 2 figures.

SUB CODE: 20/ SUBM DATE: 08Jun65/ ORIG REF: 002/ OTH REF: 003

*me*  
Card 2/2

L 36826-66 FWT(1)/T IJP(c) CG

ACC NR: AP6018765 SOURCE CODE: UR/0070/66/011/003/0375/0380

AUTHOR: Sviridov, D. T.; Sviridova, R. K.; Smirnov, Yu. F.

39  
B

ORG: Institute of Crystallography AN SSSR (Institut kristallografiyi  
AN SSSR)

TITLE: Problems of the configurations of the  $d^N$ -electrons in a crystal field. Construction of the wave functions for complex configurations

SOURCE: Kristallografiya, v. 11, no. 3, 1966, 375-380

TOPIC TAGS: electron distribution, crystal chemistry, wave function

ABSTRACT: The article presents a method for calculating the one and two-part genealogical coefficients for cubic groups which is applicable to the analysis of multipart configurations in a strong cubic field; the properties of these quantities are discussed. The article gives complete tables of calculated values of these coefficients for groups  $3/4$ ,  $3/4$ , and  $6/4$ . The article starts with a discussion of the method of classification of the states of d-electrons in a cubic field. It then proceeds to calculation of the genealogical coefficients which are used in the construction of the wave functions, and then to calculation of the matrix elements of the mathematical operators. It concludes with

Card 1/2

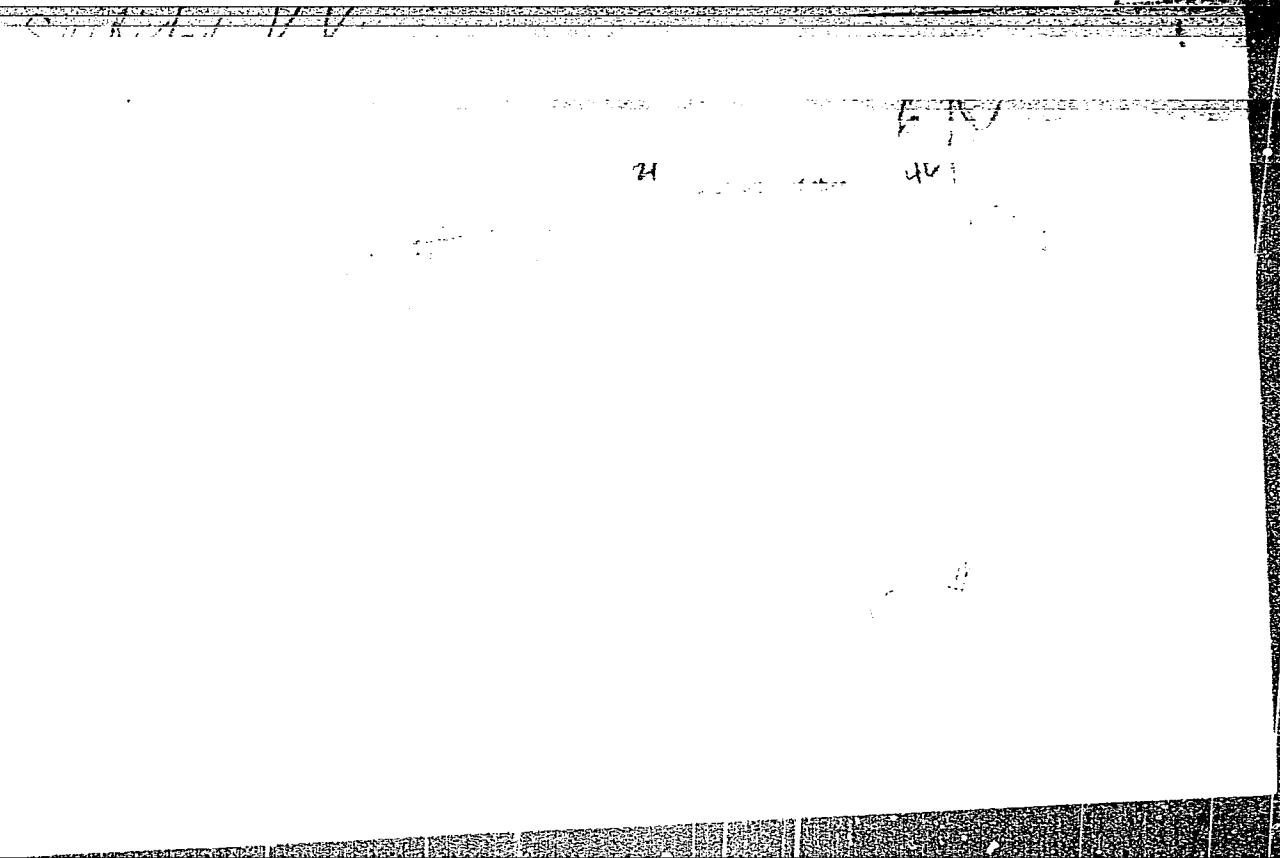
UDC: 548.0:539.18

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Card 2/2

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SVIRIDOV, V.V.

Kinetic features of the thermal decomposition of mixtures of  
nonirradiated and radiation activated strontium azide. Dokl.  
AN BSSR 2 no.7:291-293 Ag '58. (MIRA 11:10)

1. Predstavлено академиком AN BSSR N.F.Yermolenko.  
(Strontium azide) (Chemical reaction, Rate of)

SVIRIDOV, V.V.

Effect of conditions of preparation and of preliminary irradiation on  
the kinetics of the thermal decomposition of silver oxalate. Uch.zap.  
BGU no.42:233-247 '58. (MIRA 12:1)  
(Silver oxalate)  
(Chemical reaction, Rate of)

SVIRIDOV, V.V.; MAKAREVICH, I.A.

Kinetics of the thermal decomposition of silver oxalate in an  
atmosphere of different gases. Dokl. AN BSSR 3 no.5:208-210 My  
'59. (MIRA 12:10)

1. Predstavleno akademikom AN BSSR N.F. Yermolenko.  
(Silver oxalates) (Gases)

SVIRIDOV, V.V.; SAY, A.A.

Kinetic characteristics of thermal decomposition of mechanical  
mixtures and solid solutions of nickel and cobalt formates. Dokl.  
AN BSSR 5 no.10:448-451 O '61. (MIRA 15:3)

1. Belorusskiy gosudarstvennyy universitet imeni V.I.Lenina.  
Predstavлено академиком AN BSSR N.F.Yermolenko.  
(Nickel formates) (Cobalt formate) (Systems (Chemistry))

STASHONOK, V.D.; SVIRIDOV, V.V.

Photographic properties of gelatin layers containing silver  
acetylide. Zhur. nauch. i prikl. fot. i kin. 6 no. 3:186-192  
My '61. (MIRA 14:5)

1. Belorusskiy gosudarstvennyy universitet im. V.I. Lenina. kafedra  
neorganicheskoy khimii, g. Minsk.  
(Photographic emulsions)

SVIRIDOV, V.V.; BRANITSKIY, G.A.

Catalytic activity of silver obtained in the photochemical decomposition of silver oxalate. Dokl. AN BSSR 7 no.6:387-390 Je '63. (MIRA 16:10)

1. Belorusskiy gosudarstvennyy universitet imeni V.I. Lenina. Predstavleno akademikom AN BSSR N.F. Yermolenko.

L 11586-65 EWT(m)/T Pi-4/Pa-4/Pb-4 AFWL/ASD(a)-5/ESD(t)

ACCESSION NO AM4046711 BOOK EXPLOITATION

S/

Vavridov, Vasil'yeovich

B+1

Photochemistry and radiochemistry of solid inorganic matter (Fotokhimiya i radiokhimiya tverdykh neorganicheskikh veshchestv), Part 1  
Minsk, Izd-vo "Vysshaya shkola", 1964, 369 p. illus., biblio.

TOPIC TAGS: photochemistry, radiochemistry, silver halogenide, nitric acid salt, hydrazoic acid salt, hydroxyhaloid acid salt, photolysis, radiolysis

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Ch. III. Photochemistry and radiochemistry of silver halogenides --	79
Ch. IV. Photolysis and radiolysis of nitric acid, hydrazoic acid, and hydroxyhaloid acid salts --	145
Ch. V. Chemical action of radiation on compounds of elements of the first and second groups of the periodic system --	319

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