

SLAVOV, Marin, inzh.; MARINOV, Marin Kr., inzh.; BELOGAI, Aleksandur, inzh.

Hydraulic cinder pipe of the Dimitur Blagoev State Sugar Refinery
in Ruse. Khidrotekh i melior 7 no.7:216-218 '62.

MARINOV, Marin

The Medet Ore-Dressing Combinate. Tekh delo 464 1 16 F '63.

1. "Zavodski stroezhi".

MARINOV, Marin

New production possibilities according to the 1963 Plan.
Tekh delo no. 456: 1. 22 D '62.

1. Zavodski stroezhi.

MARINOV, Marin, inzh.

Reinforced concrete roof panels of the type of cylindrical shells. Stroitelstvo 10 no. 2:26-27 Mr-Ap '63.

MARINOV, Marin, ikona:stak:

Factory for forage yeast near the village of Dolna Mitropoliya. Takh dolo 500:1 24N' '63.

1. "Zavodski stroezhi".

ANGELOVA, Lidia; KRUSTEVA, Elena; MARINOV, Marin

Raising female breed lambs by depriving them of a part of their suck.
Selskestop nauka 1 no.7/8:845-854 '62.

MARINOV, ^{Marin}Marin, ikonomist

Expansion of the Devnya Cement Plant. Tekh delo 498 1
9N '63.

1. Upravlenie "Zavodski stroezhi".

KEVORKIAN, Agop, dots. d-r inzh.; MARINOV, Mikhail, inzh.

Differentiated doffing of the band of drawing machines. Tekstina
prom 12 no.4:7-11 '63.

MARINOV, Milen

"Space Week" in Zoloty Peski; report from the Congress of the International Astronautics Federation (Bulgaria). Tekh. no. 1:24-25 '63. (MIRA 16:3)

1. Glavnyy redaktor zhurnala "Nauka i tekhnika za mladezhta", Bolgariya.
(Astronautics) (Varna—Congresses)

MARICOV, H., prof.

Prof. Mako Dazov, a Dimitrov Prize Laureate. Dnevnikatel prou 7
no.5:20-21 3-4 '62.

1. Deputy Director, Institute of Forestry of the Bulgarian Academy
of Agriculture, Sofia.

MARINOV, Marin

Comparative studies of superphosphates and hyperphosphates
for sugar beet manuring. Selskostop nauka 2 no.5/6:613-
618 '63.

MARINOV, Marin

Sowing dates for sugar beet under the conditions of northern
Bulgaria. Selskostop nauka 2 no.10:1231-1238 '63.

MARTINOV, M.; MODEVA, T.; VODENICAROVA, C. [Vodenicharova, Ts.]

Glass formation in the system $5\text{CaO} \cdot 2\text{MgO} \cdot 6\text{SiO}_2 - 3\text{CaO} \cdot 2\text{SiO}_2 -$
 $\text{CaO} \cdot \text{Al}_2\text{O}_3 - \text{ZnO}$. Doklady BAN 16 no.2:149-152 '63.

1. Vorgelegt von Akademiestmitglied D. Ivanoff [Ivanov, D.].

MARINOV, M.; MOJEVA, T.; VODENICAROVA, C. [Vodenicharova, C.]

Glass formation in the system $5\text{CaO} \cdot 2\text{MgO} \cdot 6\text{SiO}_2 \cdot 3\text{CaO} \cdot 2\text{SiO}_2 \cdot \text{CaO} \cdot \text{Al}_2\text{O}_3 \cdot \text{PbO}$. Doklady BAN 16 no.1:57-60 '63.

1. Vorgelegt von Akademienmitglied D. Ivanoff [Ivanov, D.]

MARINOV, M.

Some problems in representing the structure of inorganic
glass. Godishnik khim tekhn 9 no. 3:23-38 '62 [publ. '63]

MARINOV, M.

A method of converting continuous values into a digital equivalent. Doklady BAN 17 no.2:117-120 '64.

1. Submitted by Corresponding Member E.Dzhakov.

MARINOV, M.; DIMITRIEV, J. [Dimitriev, I.]

Upper limits of glass making and glass structure in the BeO-SiO₂,
MgO-SiO₂, CaO-SiO₂, SrO-SiO₂, and BaO-SiO₂ binary systems.
Doklady BАН 17 no.10:929-931 '64.

1. Submitted June 9, 1964.

MARINOV, M.; DIMITRIEV, J. [Dimitriev, I.]

Computing the upper limits of the glass formation in the binary systems of alkali metal oxides with germanium oxide. Deklady BAK 17 no.11:1017-1019 '64.

1. Chemical and Technological Institute, Sofia-Durvenitsa. Submitted June 9, 1964.

MARINOV, M.; DIMITRIEV, J. [Dimitriev, I.]

Computation of upper phase-formation boundaries in the BeO-GeO₂, MgO-GeO₂, VSrO-GeO₂, and BaO-GeO₂ binary systems. Doklady BAN 17 no.12:1095-1097 1964.

1. Chemical and Technological Institute, Sofia-Durvenitsa.
Submitted July 6, 1964.

MARINOV, M.; DIMITRIEV, J.

Upper limits of glass formation in the binary oxide systems of alkali metals with silicon dioxide. Doklady BAN 17 no.8:717-720 '64.

1. Vorgelegt von Akademienmitglied D. Ivanov.

MARINOV, M.; DIMITRIEV, J. [Dimitriev, I.]

Computation of upper glass-formation boundaries in the BeO-GeO₂, MgO-GeO₂, CaO-GeO₂, SrO-GeO₂, and BaO-GeO₂ binary systems. Doklady Ban 17 no.12:1095-1097 '64.

1. Chemical and Technological Institute, Sofia-Durvenitsa.
Submitted July 6, 1964.

ENACHESCU, Marin; GARTNER, A.; MARINOV, M.

Mass detection of cardiovascular diseases. Stud. cercet. med.
intern. 6 no.1:47-57 '65.

I 4361-66 EWP(e)/EWP(i)/EWP(b) WH

ACC NR: AP5028416

SOURCE CODE: BU/0011/65/018/001/0019/0022

AUTHOR: ⁴⁴ Marinov, M.; ⁴⁴ Dimitriev, J.

ORG: ⁴⁴ Chemical Technology Institute, Darvenitza-Sofia (Chemisch-technologisches Institut) ²¹
³

TITLE: Glass formation limits and ^{15,44} glass structure of certain binary systems

SOURCE: Bulgarska akademiya na naukite. Doklady, v. 18, no. 1, 1965, 19-22

TOPIC TAGS: glass product, glass property

ABSTRACT: [German article] During the investigations of the upper glass-formation limit within two-component systems of which one of the oxides is a typical fourth-coordination glass producer (e.g., SiO₂) while the other plays the role of a modifier (e.g., M₂O), M. Imaoka established (Advances in Glass Technology, New York, 1962, p 149) the rule according to which the glass formation limit coincides with the component ratio for which the oxygen potential is equal to 3. This rule led its author to assume that M₂OSiO₂ at its glass-formation limit has a chain structure. The authors show on the basis of their own results and those of other authors that for this and the M₂OGeO₂ system such a structure leads to serious discrepancies between the theoretical and experimental glass formation limit results. They prove that

Card 1/2

I 4361-66
ACC NR: AP5028416

the Inacka limiting conditions cannot be correct for all modifying cations of the first (and sometimes the second) group of the periodic table. The upper glass formation limits apparently do not depend only on the number of oxygen bridge connections but also on a number of physico-chemical properties of the modifying and glass-producing cations; these properties vary periodically and regularly and affect the structure as well as the properties of the glasses, as indicated earlier by one of the authors (M. R. Marinov, Silikattechnik, 14, 1963, No 6, 169). The paper was presented by D. Ivanov, Active member, 6 Jul 64. Orig. art. has: 3 tables, 5 formulas. [JPRS]

SUB CODE: MT / SUBM DATE: 06Jul64 / ORIG REF: 001 / OTH REF: 002 / SOV REF: 001

Card ^{Ke} 2/2

L 00164-66 EWP(1)/EWP(b)/EWP(e) WH

ACCESSION NR: AP5025549

BU/0011/65/018/002/0117/0120

AUTHOR: ³⁴Marinov, M.; ⁴⁴Dmitriev, J.

TITLE: Connection between the upper glass-formation limit and the phase diagrams of certain binary systems ^{15.44}

SOURCE: Bulgarska akademiya na naukite. Doklady, v. 18, no. 2, 1965, 117-120

TOPIC TAGS: phase diagram, glass, crystallization

ABSTRACT: Starting from the "composition-property" and the corresponding phase diagrams (see, e.g., N. S. Kurnakov, Vvedeniya v fiziko-khimicheskiy analiz /Introduction to the Physico-Chemical Analysis/, M.-L., 1940), the authors studied the relations between the phase diagrams and the upper glass-formation limits of the H₂O-SiO₂ and MSiO₂ binary systems. The results show that the glass-formation limits in the system under study either coincide with the eutectic and peritectic points, or appear in the vicinity or at the maximum of the corresponding phase diagrams of the binary compound. The crystallization kinetics, determining the glass-producing capability of melts, changes periodically and discontinuously as function of the

Card 1/2

I. 00164-66

ACCESSION NR: AP5023549

isostructural domains, of the nature of the elements, and of the liquidus curves on the phase diagrams. The theoretically allowable upper glass-formation limit in the $\text{Na}_2\text{O-SiO}_2$ type systems tends towards the peritectic point. To the left of it, the modified component crystallizes as primary phase. [M = cation of element in Groups I or II of periodic system.]
Orig. art. has: 3 figures.

ASSOCIATION: Chemisch-technologisches Institut, Sofia-Darveniza (Institute of Chemical Technology)

SUBMITTED: 00

ENCL: 00

SUB CODE: GC, NT

NR REF SOV: 003

OTHER: 003

JPRS

KE
Card 2/2

L 18081-66 EWP(e) WH

ACC NR: AP6010177

SOURCE CODE: BU/0011/65/018/008/0747/0750

AUTHOR: Marinov, M.; Modeva, T.

CRG: Institute of Chemical Technology, Sofia-Darvenitza

TITLE: Chemical resistivity and structure of Na sub 2 O-SiO sub 2 glasses

SOURCE: Bulgarska akademiya na naukite. Doklady, v. 18, no. 8, 1965, 747-750

TOPIC TAGS: corrosion resistance, glass product

ABSTRACT: Earlier investigations of the resistance to acids of the K_2O-SiO_2 glasses (Compt. rend. Acad. Bulg. Sci., 18, 1965, No 7) showed an absolute correlation between the state diagram and the experimental composition-property curve. To verify that the observed agreement between the invariant points is not accidental, the authors carried out investigation on the Na_2O-SiO_2 system. Results presented in this article indicate that the observed regularities are of a general nature. The points of discontinuity seen even more pronounced in the sodium glass case. The reasons for the coincidence of the dystectic points in the Na_2O-SiO_2 phase diagrams, and the experimentally determined bending points in the composition-acid resistance curve will be discussed in a subsequent article. This paper was presented by Academician D. Ivanov on 28 April 1965. Orig. art. has: 1 figure. [JPRS]

1244 32 B

SUB CODE: 11 / SUBM DATE: 28Apr65 / ORIG REF: 001 / OTH REF: 005

SOV REF: 001

Card 1A TS

L 43001-66 T/EWP(t)/ETI IJP(c) JD SOURCE CODE: BU/0011/65/018/009/0801/0804

ACC NO: RP6031797

AUTHOR: Borisov, M.; Ivanchev, N.; Marinov, M.; Bonchev, L.

70
12

ORG: Physics Institute, BAN

TITLE: Positron annihilation in cadmium sulfide monocrystals

SOURCE: Bulgarska akademiya na naukite. Doklady, v. 18, no. 9, 1965, 801-804

TOPIC TAGS: positron, particle annihilation, cadmium sulfide, gamma quantum, valence band, conduction band, crystallography

ABSTRACT: The measurements of the angular correlation between two annihilation gamma quanta during two-photon positron annihilation represents one of the simplest methods for the study of electronic structure of substances. The present article reports on such measurements during positron annihilation in cadmium sulfide monocrystals. The authors obtained different curves for low ohmic and high ohmic crystals and the difference is probably due to the fact that in high ohmic crystals positron annihilation proceeds with the electrons of the valence band of the crystal while in low ohmic crystals part of the positrons annihilate with the conduction band electrons. This paper was presented by Academician G. Nadzhakov on 27 May 1965. Orig. art. has: 2 figures. [JPRS: 34,525]

SUB CODE: 20 / SUBM DATE: 27May65 / ORIG REF: 001 / SOV REF: 001

Card 1/1 MLP

0919 0343

L 466 1-66

ACC NR: AP6026272

SOURCE CODE: EU/0011/65/018/007/0622/0626

AUTHOR: Marinov, M.; Ribarov, S.

ORG: Physics Institute, BAN

TITLE: Device for the narrowing of a given voltage interval

SOURCE: Bulgarska akademiya na naukite. Doklady, v. 18, no. 7, 1965, 623-626

TOPIC TAGS: spectrum analysis, circuit design, circuit theory, voltage stabilizer, nuclear physics apparatus

ABSTRACT: During amplitude analysis in nuclear physics one often tries to analyse several nonadjacent sections of a spectrum. To avoid the use of several expanders, the authors present the circuit diagram of a four-terminal device capable of narrowing a given voltage interval. They specify also all the requirements on various circuit elements and express hope that the future realization of the designs will justify their theoretical expectations. This paper was presented by Corresponding Member RAN E. Dzhakov on 25 April 1965. Orig. art. has: 4 figures. [Orig. art. in Russian.] [JPRS: 33,545]

SUB CODE: 09, 20 / SUBM DATE: none

Card 1/1

0016 18-20

L 46636-66 F 1 1 11

ACC NR: AP6026276

SOURCE CODE: BU/0011/65/018/007/0643/0646

AUTHOR: Marinov, M.; Modeva, T.

ORG: Institute of Chemical Technology, Daryenitsa-Sofia

TITLE: Chemical stability and the structure of K sub 2 - SiO sub 2 system glasses

SOURCE: Bulgarska akademiya na naukito. Doklady, v. 18, no. 7, 1965, 643-646

TOPIC TAGS: chemical stability, glass property, glass eutectic mixture

ABSTRACT: To check the possible existence of corners on the composition-properties curves of glasses and to correlate them (if they exist) with some invariance points of the phase diagrams, the authors studied the chemical stability of K₂O-SiO₂ systems. Results show that the property curve is clearly correlated with its liquidus curve. Contrary to the earlier beliefs, the corners appear at the eutectic as well as distectic points. The authors believe that these results confirm the existence of periodic changes in the structure of glasses as function of their chemical composition, as claimed earlier by one of the authors (M. R. Marinov, Silikattechnik, 14, 1963, 5, 131; Ibid., 14, 1963, 6, 169). This paper was presented by Academician D. Ivanoff on 19 March 1965. Orig. art. has: 1 figure and 1 table. [Orig. art. in German] [JPRS: 33,540]

SUB CODE: 11, 07 / SURE DATE: none / SOV REF: 007 / OTH REF: 008

Card 1/1

0976

1850

MARINOV, M.A.:

Pre-Cambrian deposits of Mongolia. Izv. AN SSSR, Ser.geol, 21 no.6:47-
57 Je '56, (MIRA 9:10)

1. Ministerstvo geologii i obrany nedr SSSR, Insitut gidrogeologii
i inzhenernoy geologii "VSEGEONGEO," Moskva.
(Mongolia--Geology, Stratigraphic)

MARINOV, M. D.

"Let us Preserve and Improve the Valuable Forests in Dobredja," p. 120.
(Gorsko Stopanstvo, Vol.8, No.3, Mar. 1952, Sofiya.)

SO: Monthly List of ^{East European} ~~Foreign~~ ^{Vol.2, No.9} Accessions, Library of Congress, September 1953, Uncl.

MARINOV, M.

"Renewing the oak plantings in the Voden wood.", p 292, (GORSKO STOPANSTVO, Vol. 8, #7, Sept 1952, Bulgaria)

East European Vol 2 #8
SO: Monthly List of ~~NEW~~ Accessions, Library of Congress, August 1953, Uncl.

M. MARINOV

"The condition of the Mansurevska forest and measures for its improvement.", p 388,
(GORSKO STOPANSTVO, Vol 8, #9, Nov. 1952) (Bulgaria)

East European Vol 2 #8
SO: Monthly List of ~~Russian~~ Accessions, Library of Congress, August 1953, Uncl.

MARINOV, M. and CHEMIAVSKI, P.

"Types of Forests in Dobruja" p.7
(GORSKO STOPANSTVO Vol. 9, no. 1, Jan. 1953, Sofiya, Bulgaria)

SO: Monthly List of East European Accessions, Library of Congress, Vol. 2, No. 9,
Oct. 1953, Uncl.

MARINOV, M.

"On the Problem to Inculcate Michurin's Teaching in Forestry." p.108
(GORSKO STOPANSTVO Vol. 9, no. 3, Mar. 1953 Sofiya, Bulgaria)

SO: Monthly List of East European Accessions, Library of Congress, Vol. 2, No. 9,
Oct. 1953, Uncl.

MARTINOV, M. / BOCHEV, P.

"Condition of some older trees in Dobrudzha (Dobruja)" (p.15) GORSKO STOPANSTVO
(Upravlenie Na Gorskoto Stopanstvo Kum Ministerskiiia Suvet) Sofiya Vol 10 No 1 Jan 1954

SO: East European Accessions List Vol 2 No 7 Aug 1954

MARINOV, M. - Gorsko Stopanstvo

Some shortcomings in transportation of timber from the main cutover land of beech forests.
p. 450
(GORSKO STOPANSTVO Vol. 10, No. 10, Dec. 1954)

SO: Monthly List of East European Accession, (KEAL), LC, Vol. 4, No. 9, Sept. 1955
Uncl.

MARINOV, M. - Gorsko Stopanstvo

Possibility of introducing two-phase gradually cutover land in our high-branched beech
and oak forests. p. 105
(GORSKO STOPANSTVO Vol. 11, No. 3, Mar. 1955)

SO: Monthly list of East European Accession, (EEAL), IC, Vol. 4, No. 9, Sept. 1955, Uncl.

BULGARIA / Forestry. Biology and Typology of the Forest. K-1

Abs Jour: Ref Zhur-Biol., No 6, 1958, 24846.

Author : Radkov, Iliya N.; Marinov, Marin D.

Inst : Not given.

Title : Biological Features of Firs Cultivated in the
Leskhoz imeni V. Kolarov (Beglik hollow).

Orig Pub: Izv. Botan. in-t. B'lgar. AN, 1956, 5, 145-189.

Abstract: The leskhoz is situated in the central part of the
Western Rhodopes, 1600-1800 m. above sea level.
The soil-climatic conditions of the region are
described. Pure fir groves (80% of the area) on
the northern slopes rise above 1,600 m., while on
the southern ones - to the very border of the for-

Card 1/4

BULGARIA / Forestry. Biology and Typology of the Forest. K-1

Abs Jour: Ref Zhur-Biol., No 6, 1958, 24846.

Abstract: est (2,000 m.). Native plantations are characterized by clearly being of all ages, graded slopes, low branch density, and a grouped arrangement of trees, distinguished by pronounced cone-shaped crowns. Natural renewal of the fir groves proceeds very well on the northern slopes and well on the southern ones; at the height of 1850-1900 m., it strongly deteriorates. On the northern slopes, the young trees adapt on the whole to the natural glades with more sparse cover of bilberries and grow very slowly here, developing a great need for light. On the southern slopes, it is arranged under cover of the maternal plantings, avoiding in this way injurious extreme temperatures. Elimination of the mother plantings as a result of fellings, wind or fire does not lead to a change of

Card 2/4

1

BULGARIA / Forestry. Biology and Typology of the Forest. K-1
Abs Jour: Ref Zhur-Biol., No 6, 1958, 24846.

Abstract: the species. Extensive fir cutting on the northern slopes with a steepness up to 20° are renewed satisfactorily, although through a prolonged period. The renewal of cuttings on the southern slopes (particularly on the steep ones) is impeded, and possible only following the settlement here of the juniper, pine and some other species. The composition is cited of the species of the rich soil covering coating of the fir groves (shrubby and mosses) and the influence on its condition of thinning out the tree cover is shown. The reasons are determined, which cause the seasonal appearance of the fir plantings and recommendations are cited on

Card 3/4

- BULGARIA / Forestry. Biology and Typology of the Forest. K-1

Abs Jour: Ref Zhur-Biol., No 6, 1958, 24846.

Abstract: methods of conducting the main fellings, depending on the altitude location of the plantings. Bib. 10 titles.

Card 4/4

2

BULGARIA / Forestry. Forest Management.

K

Abs Jour : Ref Zhur - Biologiya, No 18, 1958, No. 82193

Author : Marinov, Marin; Gruyev, Iven

Inst : Not given

Title : Conference on Problems of Full-Grown Tree Management

Orig Pub : Gorsko stopanstvo. 1956, No 6, 273-288

Abstract : A report is rendered on the June, 1956 conference (Bulgaria) of the Administration of Forest Management on problems relating to the restoration of full-grown plantations. Results of the principal harvest cuttings in oak forests, problems of growth and development of the oak second growth, and determination of the total extent of utilization of regenerated tree stands are reported. It is suggested that in the future short-term seed-tree felling be put into operation (technique described), and that the cultivation of mixed plantations

Card 1/2

BULGARIA / Forestry. Forest Management.

K

APPROVED FOR RELEASE: 09/19/2001 18, CIA-RDP86-00513R001032410005-5"

be directed with artificial introduction of underbrush.
-- L. K. Artyukhova

Card 2/2

MARINOV, M.

Management of forests in Rumania. p. 82

GORSKO STOPANSTVO. Vol. (12) No. 2, (Feb.) 1956

Sofia, Bulgaria

So. East European Accessions List

Vol. 5, No. 9

September, 1956

MARINOV, M.

Achievements of the Rumanian People's Republic in forestry. p. 132

GORSKO STOPANSTVO. Vol. 12, No. 3, Mar. 1956

Sofia, Bulgaria

So. East European Accessions List

Vol. 5, No. 9

September, 1956

MARINOV, M.

A scientific conferenc. p. 142

GOORSKO STOPANSTVO. Vol. 12, No. 3, Mar. 1956

Sofia, Bulgaria

So. East European Accessions List

Vol. 5, No. 9

September, 1956

MARINOV, M.; GRUEV, I.

MARINOV, M.; GRUEV, I. Conference on management of high-trunk oak forests. p. 273.

Vol. 12, No. 6, June 1956.

GORSKO STOPANSTVO

AGRICULTURE

Sofia, Bulgaria

So: East European Accession, Vol. 6, No. 2, February 1957

MARINOV, M.

BULGARIA / General Division, Congresses, Conventions, Conferences A-4

Abs Jour : Ref Zhur - Biol., N o 1, 1958, No 107

Author : Gruyev, Iv., Marinov M.

Inst : Not Given

Title : The Conference on the Question of the Renewal of the Beech
Forests in Bulgaria

Orig Pub : Gorsko stopanstvo, 1956, 12, No 7, 325-333

Abstract : Reported are the results of the congress of foresters which took place on July 12-15, 1956 in Bulgaria with representatives of the German DR and the Rumanian PR participating. The questions of the renewal of the beech plantings in the German DR and Bulgaria and the improvement of the beech forests of the Rumanian PR were touched upon in 4 reports; the composition of the forests of the Rybarishkiy forestry are characterized.

Card : 1/1

MARINOV, M.

K.

GER/Forestry - Tree Biology and Typology.

Abs Jour : Ref Zhur - Biol., No 21, 1958, 95817

Author : Cernjavski, P., Marinov, M.

Inst :

Title : Forest Typology at Work with Forest Management in the Bulgarian People's Republic.

Orig Pub : Forst und Jagd, 1957, 7, No 12, 532-535

Abstract : In Bulgaria, the forester often has dealings with nonforested areas (burns, eroded areas, sandy deposits, etc.). Forest raising is possible in these areas with the careful study of local growths with subsequent transfer to the corresponding forest types. In recent years, a Soviet-Bulgarian scientific expedition worked in Bulgaria with the aim of providing the basis for future detailed study of forest types. Investigations were conducted in the conifer forests of the western Rhodope Mountains and in the beech forests of the Balkans. In the Rhodopes at a

Card 1/2

MARINOV, M.

BULGARIA/Forestry. General Problems.

K-1

Abs Jour : Ref Zhur - Biol, 1958, No 2, 5852

Author : Marinov, M., Mikhaylov, St., Kaludin, Kr.

Inst : -

Title : The Coordination of Research in Tree Husbandry and Forest
Exploitation For the Exploitation of Beech Forests.

Orig Pub : Gorsko Stopanstvo, 1957, 13, No 5, 195-204

Abstract : No abstract.

Card 1/1

MARINOV, M. D.

Reforestation of the beech forests in Bulgaria. p. 24
Teknika Vol. 7, No. 5, 1958. Sofia, Bulgaria.

Monthly Index of East European Accessions (EEAI) LC, Vol. 7, No. 10,
Oct. 58

MARINOV, M.

TECHNOLOGY

Periodical IEKA PROMISHLENOST. TEKSTIL. Vol. 7, no. 9, 1958.

MARINOV, M. Innovations introduced at the Balkan State Industrial Enterprise in Gabrovo. p. 33.

Monthly List of East European Accessions (E- AI) LC, Vol. 8, no. 3, March, 1959. Uncl.

MARINOV, M.

"Thirty Years of Scientific-Research Work of the Forest Economy."

p. 34 (Gorsko Stopanstvo, Vol. 14, No. 6, June 1958, Sofia, Bulgaria)

Monthly Index of East European Accession (EEAI) LC, Vol. 7, No. 11,
Nov. 1958

MARINOV, M.

"Decreasing the stays, an important reserve for increasing the production."

LEKA PROMISHLENOST, Sofia, Bulgaria, Vol. 8, No. 5, 1959.

Monthly list of EAST EUROPEAN ACCESSIONS INDEX (EEAI), Library of Congress,
Vol. 8, No. 8, August, 1959.

Unclassified.

MARINOV, M.; NAUMOV, Z.

"The forest soil in the life of the forest."

GORSKO STOPANSTVO, Sofia, Bulgaria, Vol.15, no. 3, Mar. 1959.

Monthly list of East Europe Accessions (EEAI), LC, Vol. 8, No. 6, ^{Sept.} ~~Jun-59~~
Unclas

MARINOV, M. D., CAND AGR SCI, "OAK FORESTS OF NORTHEASTERN
BULGARIA AND THEIR MANAGEMENT." MOSCOW, 1961. (MOSCOW OR-
DER OF LENIN AGR ACAD IM K. A. TIMIRYAZEV). (KL, 3-61,226).

MAPINCH, N. P., LEONENKO, B. B., STEFANOVA, E. A., STANISLAV, A. P.,
STUPNITSKAYA, V. N., SILVA, V. V., KUZNETSOVA, G. P., ALF, . . .,
ARAV VITC, V. V.

"On the natural focus of malaria in the Ukrainian SSR." p. 16.

Desyatye soveshchan'ye po parazitologicheskim problemam i prirodoznan'yu vuz
blozhyam. 22-29 Oktjabrja 1959 g. (Tenth Conference on Parasitological
Problems and Diseases with Natural Foci 22-29 October 1959), Moscow-Leningrad,
1959, Academy of Medical Sciences USSR and Academy of Sciences USSR, 251 p.

Basin Sanitary-Epidemiological Station, Public Health Min. UK SSR/Kiev

L 17971-65 EWT(1)/T/EMA(b) Pa-4 AMD JK

ACCESSION NR: AP5002642

S/0016/64/001/010/0094/0098

AUTHOR: Stupnikskaya, V. M.; Marinov, M. P.; Litvinenko, Ye. F.; Slesarenko, V. V.; Slesarenko, A.S.; Khizhinskaya, O.P.; Stepanova, I. A.; Buyalo, S. G.

TITLE: Natural foci of tularemia in the Ukrainian SSR

SOURCE: Zhurnal mikrobiologii, epidemiologii i immunobiologii, no. 10, 1964, 94-98 ^B

TOPIC TAGS: bacterial disease, immunology, disease control

ABSTRACT: Between 1956 and 1962, 265 cultures of the tularemia pathogen were isolated from 350,000 ticks collected in various districts of the Ukrainian SSR. The foci were maintained by several rodent hosts and the disease was carried by Ixodes ricinus, Dermacentor pictus, and other blood-sucking insects. The article contains detailed descriptions of the important tularemia foci in the Ukraine and method of selective vaccination used in control measures. Orig. art. has 2 tables.

ASSOCIATION: Basseynovaya sanitarno-epidemiologicheskaya stantsiya Ministerstva zdravookhraneniya, UkrSSR, Kiev; (Basin Sanitary and Epidemiological Station, Ministry of Health, UkrSSR)

Card 1/2

L 17971-65

ACCESSION NR: AP5002642

SUBMITTED: 04Dec62

ENCL: 00

SUB CODE: LS, GO

NO REF SOV: 003

OTHER: 000

JPRS

Card 2/2

Distr: 4E2c/4E2c(j)

Processes occurring during formation of foam glass.
 St. Gatoev and M. Marinyov. *Gedishnik Khim. i Sposob.*
Jan. 3, Livre 2, 1-24 (1966) Russian summary 35-8, Ger-
man summary 36-38.—Differential thermal analysis
 (DTA) was used to study fundamental processes leading to
 the formation of foam glass (I). DTA was supplemented
 with various specific tests to det. loss of wt. with temp.,
 beginning of gas evolution, or change in surface area.
 Powd. glass reacted either with powd. marble (II) or dolo-
 omite (III) to give I. DTA gave a peak for II at 980°;
 for III at 730° and 980°, the first resulting from decompn.
 of MgCO₃ and the second from decompn. of the mixt.
 of MgCO₃-CaCO₃. Chem. reactions between glass and II or
 III gave lower decompn. temps.; amorphous SiO₂ lowered
 decompn. temps. more than did cryst. SiO₂; the effect of Na₂-
 SiO₂ was complex. Glass alone gave an endothermic peak
 due to change in its sp. heat and an exothermic peak due to
 crystn. Microscopic examn. of I showed massive crystn.
 in the glass phase, probably caused by increase in CaO
 concn. There were no crystals in I prepd. with Na₂CO₃.
 G. H. Marinyov

15
3
2

11/11
ch

BULGARIA / Chemical Technology. Chemical Products and H-13
Their Application--Ceramics. Glass. Bind-
ing Materials. Concrete

Abs Jour: Ref Zhur-Khimiya, No 3, 1959, 9064

Author : Marinov, M.

Inst : Not given

Title : Preparing Filters with a Glass Fiber Base

Orig Pub: Godishnik Khim.-Tekhnol. in-t, 1956 (1957),
No 1, 11-19

Abstract: A new method is described for preparing filters
from glass fiber (GF), based on sintering of
glass cotton under conditions providing production
of a material with an isotropic structure. The
chemical composition of GF (in percent) is:

Card 1/2

BULGARIA / Chemical Technology. Chemical Products and H-13
Their Application--Ceramics. Glass. Bind-
ing Materials. Concrete

Abs Jour: Ref Zhur-Khimiya, No 3, 1959, 9064

SiO₂ 71.24, R₂O₃ 2.16, CaO 9.46, MgO 0.92, R₂O
16.22; diameter of GF; 25-50 microns; beginning
of softening temperature, 580 degrees; specific
gravity, 2.49. The properties of the filters
produced were studied: the water adsorption,
general weight, the apparent and real porosity
and resistance to compression. The ability to
produce filters from GF with a porosity within
the limits of 20 to 70 percent and resistance to
compression from 10 to 1,200 kg per square cm is
indicated. Bibliography, 7 references. --S. Iofe

Card 2/2

147

BEZBORODOV, M.A., akademik; MARINOV, M.R., dots. (Sofiya)

Chemical and technological study of glass from the old Bulgarian capitols of Pliska and Preslav (IX - XIII centuries). Vestnik AN BSSR. Ser. fiz.-tekh.nav. no.4:72-81 '58. (MIRA 12:4)

1. AN BSSR (for Bezborodov).
(Bulgaria--Glass)

MARINOV, Marin P.

Approximate determination of the field of glass formation in the
tricomponent system $\text{Li}_2\text{O}-\text{MoO}_3-\text{P}_2\text{O}_5$. *Gedishnik khim tekhn* 5 no.2:1-11
'58 (Publ. '60).

MARINOV, M.; MUMCHILOVA, P.

Influence of ions exchange in the surface layers of the silicate glass on its crystallizing capacity. *Godishnik khim tekhn 5 no.2: 85-96 '58 (Publ. '60)*

MARINOV, M.

alt
///

Crystal counters of cadmium sulfide with a high-frequency electric field. M. Borisy and M. Marinov. *Compt. rend. acad. bulgare sci.* 11, No. 3, 1968 (Russian). A crystal of CdS is covered with Au electrodes and connected in parallel with an oscillatory circuit. Nuclear particles striking the crystal cause changes in the anode current of a lamp which are recorded as voltage impulses. Polarization effects are eliminated by a high-frequency voltage. An α -spectrum of Th C and Th C' is successfully obtained.

John H. Fishwick

K.

BULGARIA/Electronics - Photocells and Semiconductor Device.

H

Abs Jour : Ref Zhur Fizika, No 2, 1960, 4028

Author : Marinov, M.

Inst :

Title : Hole Conductivity in the Process of Pulse Shaping in
Crystal Counters Made of Cadmium Sulfide

Orig Pub : Dokl. bolg. AN, 1958, 11, No 5, 371-374

Abstract : Crystal counters made of CdS can be considered as exact replicas of pulsed ionization chambers. In this case if the ionization takes place between the counter electrodes, one can assume that both electrons and holes (if the latter are mobile) participate in the production of a pulse. This circumstance should manifest itself in the presence of a steep and gentle portion in the leading front of the pulse. It is indeed pulses of this shape that have been observed by the authors in counters made of CdS (an oscillogram is included). From the

Card 1/2

- 71 -

BULGARIA/Electronics - Photocells and Semiconductor Device.

H

Abs Jour : Ref Zhur Fizika, No 2, 1960, 4028

slope of the steep and gentle portions of the leading front of the pulse the author calculates the ratio of the electron and hole velocities and obtains values on the order of 10^{-2} -- 10^{-3} .
Bibliography, 11 titles.

Card 2/2

4
3
/ Counting efficiency of thin cadmium sulfide crystals in the conductance pulse method. M. MARINOV and KHR. VODNICHAROV. *Compt. rend. acad. bulgare sci.* 12, 609-11(1958) (in French); cf. Vitovakli, et al., *Zhur. Tekh. Fiz.* 28, 460(1958).
—The counting efficiency of thin CDS crystals for α particles by detection of the conductance pulses caused by the irradiation has been studied. α particles from Po^{210} were passed through various areas of the same crystal. The terminals of evapd. Au, were connected to a counter whose input resistance was high compared to the resistance of the crystal during a pulse. The counting efficiency was essentially const. under these conditions. George L. Canahigham

MARINOV, M.; ZHELIAZKOV, I.

"Retarding the development of discharge in low-voltage halogen computers in relation to the temperature." In Russian. p. 17.

DOKLADY. Sofia, Bulgaria, Vol. 12, No. 1, January/February, 1959.

Monthly List of East European Accessions (EEAI), IC, Vol. 9, No. 2, February, 1960. Uncl.

BEZBORODOV, Mikhail Alekseyevich, prof. (Minsk); MARINOV, M.

On the contents of ancient Bulgarian glass from Pliska and Preslav,
from the 9-13 centuries. Izv Inst khim BAN 7:13-25 '60.
(EKAI 10:9)

1. Zaveshdasht Katedra po stuklo v Beloruskii politekhnicheski
institut (for Bezborodov).

(Glass)

MARINOV, M., VASIL'YEV, I., MARINOVA, Ye., and BORISOV, M. D.

Issledovaniya Vozmozhnosti Primeneniya Kristallicheskikh Schetchikov
iz Sernistogo Kadmiya.

Report submitted for the Nuclear Electronics Conference, IAEA, Belgrade,
Yugoslavia, May 1961

MARINOV, M. R.; MODEVA, T. S.

Synthesis and properties of glass in a particular case system.
 $\text{Na}_2\text{O}-\text{CaO}-\text{MgO}-\text{Al}_2\text{O}_3-\text{Fe}_2\text{O}_3-\text{SiO}_2$. Doklady BAN 14 no.5:487-489 '61.

1. Vorgelegt von Akademienmitgl. D. Ivanov.

(Glass)

24,2600

S/058/62/000/008/007/134
A061/A101

AUTHORS: Marinov, M., Marinova, Ye., Germanova, K.

TITLE: Negative conductivity pulses in cadmium sulfide crystal counters

PERIODICAL: Referativnyy zhurnal, Fizika, no. 8, 1962, 10, abstract 8B58
("Dokl. Bolg. AN", 1961, v. 14, no. 8, 783 - 785; summary in French)

TEXT: This is a preliminary report on a phenomenon analogous to the negative photoelectric effect, observed in CdS crystal counters. This phenomenon is characterized by the occurrence of a pulse with a polarity corresponding to an increase of its resistance when bombarding the counter with alpha particles. A picture taken from the oscilloscope screen is presented which indicates the presence of zones with positive and negative pulses in the crystal. The results obtained are discussed. √B

[Abstracter's note: Complete translation]

Card 1/1

B/007/62/000/002/002/012
D204/D307

AUTHORS: Marinov, M., Vodenicharova, Ts. and Modeva, T.
TITLE: Glass-forming in the system $\text{CaO-MgO-Al}_2\text{O}_3\text{-SiO}_2$
PERIODICAL: Referativnyy byulleten' Bolgarskoy nauchnoy literatury, Khimiya i khimicheskaya tekhnologiya, no. 2, 1962, 4, abstract 91, Doklady BAN, 14, 1961, book 8, pp 807-810 (Ger., Rus. summary)

TEXT: The aim of the present work was the synthesis and study of non-alkaline or alkali-poor glasses with increased Al_2O_3 and CaO partly substituted with MgO . The oxide ratios were thus selected to correspond to 5CaO , (sic) $2\text{MgO}.6\text{SiO}_2$, $3\text{CaO}.2\text{SiO}_2$ and $\text{CaO}.Al_2\text{O}_3$. The system was studied at 107 points, and the melts were tested for glass-forming tendencies by pouring them onto a metallic plate. The glass-forming region established experimentally includes widely variable compositions (%): CaO 39-56, MgO 0-11.2, Al_2O_3 0-29, SiO_2 28-50. The authors note that the system studied has three

Card 1/2

Glass-forming in the system ...

B/007/62/000/002/002/012
D204/D307

regions of practical interest: A) glass of considerable hardness, B) glass absorbing only weakly in the infrared, C) the so-called tungsten glass with an expansion coefficient of 40×10^{-7} . Glass-forming in regions A and B is only possible when some components are replaced with PbO , B_2O_3 or Na_2O .

[Abstracter's note: Complete translation]

Card 2/2

S/081/62/000/002/069/10
B150/B101

AUTHORS: Marinov, M. R., Modeva, T. S.

TITLE: Vitrification in the system $\text{Na}_2\text{O} - \text{CaO} - \text{MgO} - \text{Al}_2\text{O}_3 - \text{Fe}_2\text{O}_3 - \text{SiO}_2$

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 2, 1962, 378, abstract: 2K240 (Khimiya i industriya, v. 33, no. 3, 1961, 77 - 81)

TEXT: The field of vitrification was developed of a six-fold system of composition, containing oxides in the following ranges (in %): Na_2O 0-6, CaO 18-30, MgO 0-18, Al_2O_3 0-24, Fe_2O_3 4-24, SiO_2 39-65 in non-stoichiometric proportion. [Abstracter's note: Complete translation.] ✓

Card 1/1

B/007/62/000/002/003/012
D204/D307

AUTHORS: Marinov, M. and Modeva, T.

TITLE: Determination of some properties of glasses synthesized during the study of a particular $\text{Na}_2\text{O}-\text{CaO}-\text{MgO}-\text{Al}_2\text{O}_3-\text{Fe}_2\text{O}_3-\text{SiO}_2$ system

PERIODICAL: Referativnyy byulleten' Bolgarskoy nauchnoy literatury, Khimiya i khimicheskaya tekhnologiya, no. 2, 1962, 4, abstract 92, Khimiya i industriya, 33, 1961, book 6, pp 175-179 (Rus. and Ger. summaries)

TEXT: The authors studied the crystallizabilities, initial softening points, water stabilities, acid-stabilities, densities and refractive indices of glasses forming in the $\text{Na}_2\text{O}-\text{CaO}-\text{MgO}-\text{Al}_2\text{O}_3-\text{Fe}_2\text{O}_3-\text{SiO}_2$ system. Each glass showed an increased tendency towards crystallization. From the synthesized glasses the authors obtained pyroceram-like bodies by thermal treatment, which had an initial softening point of 1025°C , without the addition of catalysts to stim-

Card 1/2

Determination of some properties ...

B/007/62/000/002/003/012
D204/D307

ulate primary nucleation. In contrast to materials described in the literature, the microcrystalline bodies obtained are made from a low-melting initial change (1300°C), of cheap and easily accessible substances, and initiating of the crystallization is done directly by heating and not by exposure to high-energy irradiation. Ferric oxide, which favors nucleation, probably exerts a modifying action on the nature of crystallization. The obtained glasses have a high water resistance and may be regarded as belonging to the IInd hydrolytic class. The acid resistance to 2NHC1 solutions is low. The softening temperature is relatively high (790-750°C). The density varies between 2.80 and 2.97 g/cm³, and the refractive index between 1.582 and 1.636.

[Abstracter's note: Complete translation]

Card 2/2

BGRISOV, M.; MARINOV, M.; VASILEV, Iv.; MARINOVA, E.

Studies on the crystal counters of cadmium sulfide.
Izv fiz atom BAN 9 no.2:73-85 '62.

MARINOV, M.; VASILEV, Iv.

Polarization phenomena of the cadmium-sulfide crystal counters
and their dependence on temperature. Izv fiz atom BAN 9
no.2:87-90 '62.

MARINOV, M.; MARINOVA, E.; VODENICHAROV, Khr.

Computing efficiency of the cadmium-sulfide crystal counters with electrodes fixed on one side. Izv fiz atom BAN 10 no.1:47-50 '62.

1. Fizicheski institut s ANEB pri BAN.

MARINOV, M.; VODENICAROVA, C. [Vodenicharova, TS.]; MODEVA, T.

Glass formation in the system $\text{Na}_2\text{O} - \text{CaO} - \text{MgO} - \text{Al}_2\text{O}_3 - \text{SiO}_2$.
Doklady BAN 15 no.1:33-35 '62.

1. Vorgelegt von Akademienmitglied D. Ivanov; chlen Redaktsionnoy koleгии, "Doklady Bolgarskoy Akademii nauk."

MARINOV, M.; VODENICAROVA, C. [Vodenicharova, Ts.]; MODEVA, T.

Vitrification and the crystallization capacity in two cross sections of the system $B_2O_3-5CaO.2MgO.6SiO_2-3CaO.2SiO_2-CaO$. ~~1962~~. Doklady BAN 15 no.4:389-392 '62.

1. Vorgelegt von Akademienmitglied D. Ivanoff [Ivanov, D.]. Chlen Redaktsionnoy kollegii, "Doklady Bolgarskoy akademii nauk."

43369

S/056/62/043/005/030/058
B102/B104

24.4400

AUTHOR: Marinov, M. S.

TITLE: On a formfactor satisfying the unitarity condition

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 43,
no. 5(11), 1962, 1769 - 1770

TEXT: It is shown that the relation between formfactor and scattering amplitudes can be derived in a simple way when the R-matrix formalism is used. This formfactor has to satisfy unitarity and analyticity conditions. If only one partial wave is considered the formfactor $F(s)$ will satisfy the unitarity condition $F^* - F = 2iqF^*T$, or, if

$$T = R(1 - ipR)^{-1} \equiv (\rho'/\rho) R'(1 - ip'R')^{-1}, \quad \rho' = \sqrt{s - (m_1 + m_2)^2}, \quad (1)$$

holds for the partial amplitude, $F = f(1 - iq'R')^{-1}$. s is the square of the momentum transferred, q is the statistical weight of the two-particle state.

$\frac{\text{Im } f}{f} = - \frac{|\beta'| \text{Im } R'}{1 + |\beta'| |R'|}$; this equation can be solved with arbitrary accuracy since R' is a polynomial of s . f has no zeros and its poles coincide with Card 1/3

On a formfactor satisfying...

S/056/62/043/005/030/058
B102/B104

the poles of R' . If the scattering amplitude, i.e. R' , is known, f can be determined uniquely from the above relation. Within a small range of s one can assume the R' has no discontinuities and is therefore a rational function of s . The same will then hold for f which can be determined in this case from the zeros of F . If F has no zeros it can be assumed that $|F|$ will not grow with $s \rightarrow \infty$, so the arbitrariness in the choice of f is reduced. As an example the behavior of F near $s=s_0$, where a scattering resonance with $R'=a/(s-s_0)$ and $F = f(s-s_0)/(s-s_0-ia)$ should exist, is studied. From $F(0)=1$ and the demand that $|F|$ should not increase

$$f \sim \frac{s-s_1}{s-s_0}; \quad F = \frac{s_0 - (m_1 + m_2)a}{s_1} \frac{s-s_1}{s-s_0-ia}$$

is obtained. The zero of F , s_1 , is assumed to be so far from s_0 that F may be said to have a zero at infinity,

$$F = \frac{-s_0 + (\pi_1 + m_2)a}{s-s_0-ia}$$

Hence within a small region of s it is a very simple matter to determine

Card 2/3

On a formfactor satisfying...

S/056/62/043/005/030/058
B102/B104

the formfactor that satisfies the unitarity condition in two-particle approximation. The typical ambiguity arising with this problem was first pointed out by Dyson et al. (Phys. Rev. 101, 453, 1956).

SUBMITTED: May 22, 1962

J

Card 3/3

ACCESSION NR: AP4025928

S/0056/64/046/003/0947/0962

AUTHOR: Marinov, M. S.

TITLE: Regge poles and interactions between particles with spins

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 46,
no. 3, 1964, 947-962

TOPIC TAGS: Regge pole, S matrix theory, spin kinematics, pion
nucleon scattering, helicity amplitude, pion nucleon scattering,
pion production, nucleon isobar production, Rho meson, nucleon
resonance, pion resonance, Wigner symbol, rotation matrix, isospin
structure

ABSTRACT: The helicity formalism of Jacob and Wick (Ann. Physics,
v. 7, 404, 1959) is used to determine all the kinematic details of
cross sections for scattering of particles with spin via Regge poles
of arbitrary quantum numbers. The processes considered in particu-

Card 1/2

ACCESSION NR: AP4025928

lar involve pions, pion resonances such as the ρ meson, nucleons, and nucleon resonances such as the $(3/2 \ 3/2)$ isobar. Liberal use is made of the Wigner 3-j and 6-j symbols and of rotation matrices to take care of both the mechanical spin and isotopic spin structures. Specific examples are worked out. "The author thanks I. Yu. Kobzarev, L. B. Okun', V. I. Roginskiy, A. P. Rudik, and K. A. Ter-Martirosyan for a discussion and for critical remarks." Orig. art. has: 4 figures and 60 formulas.

ASSOCIATION: None

SUBMITTED: 03Aug63

DATE ACQ: 16Apr64

ENCL: 00

SUB CODE: PH

NO REF SOV: 004

OTHER: 009

Card 2/2

L 1141-66. EWT(m)/T/EWA(m)-2

ACCESSION NR: APS019592

UR/0386/65/001/006/0023/0028

AUTHOR: Geshkenbeyn, B. V.; Ioffe, B. L.; Marinov, M. S.; Roginskiy, V. I.

TITLE: Incompatibility of relativized unitarity SU(6) symmetry

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki. Pis'ma v redaktsiyu. Prilozheniye, v. 1, no. 6, 1965, 23-28

TOPIC TAGS: particle symmetry, unitary symmetry, quark model, nuclear scattering, nuclear particles

ABSTRACT: Scattering amplitudes are studied for singlet-quark and quark-quark scattering in the U(12) model. The difficulties which are encountered are apparently characteristic for any relativistic generalization of SU(6) symmetry. It is found that there should be resonance in all partial waves, if any resonance is present, both for the case where a spin-zero particle which is a unitary singlet is scattered by a quark and for quark-quark scattering even without elastic unitarity. "The authors are deeply grateful to V. N. Gribov, Yu. Kobzarev, Ya. Pomeranchuk and K. A. Ter-Martirosyan for consultation and valuable advice."

ASSOCIATION: Otdeleniye yadernoy fiziki Akademii nauk SSSR (Department of Nuclear Physics, Academy of Sciences, SSSR)

SUBMITTED: 10May65
Card 1/1

ENCL: 00
NO REF SOV: 000

SUB CODE: NP
OTHER: 005

L 2750-66 EWT(m)/T/EWA(m)-2
ACCESSION NR: AFS024347

UR/0367/65/002/002/0321/0325

AUTHOR: Marinov, M. S.

32
23
B

TITLE: Experimental data on resonance widths and predictions of SU(3) symmetry

SOURCE: Yadernaya fizika, v. 2. no. 2, 1965, 321-325

TOPIC TAGS: particle symmetry, unitary symmetry, particle physics, baryon

ABSTRACT: The latest theoretical data are used as a basis for establishing a relationship between resonance width and particle mass. The predictions of SU(3) symmetry are discussed with regard to decay of a vector particle into two pseudoscalar particles, baryon decuplet decay and the case of a baryon octet with quantum numbers of $\frac{3}{2}^-$ and $\frac{3}{2}^+$, and the experimental and theoretical data for the ratios between partial widths of strong decays in these categories are compared. It is found that inclusion of $\Sigma^*(1820)$ resonance in any $\frac{3}{2}^-$ octet strongly contradicts the experimental data on the partial widths of this decay. The author discusses the theoretical possibility of introducing a new parameter for partially explaining the discrepancy between experiment and theory with respect to scattering amplitude. This

Card 1/2

L 2750-66

ACCESSION NR: AP5024347

9

parameter is in essence a form factor based on a model which attempts to account for interaction between the end products of the decay. Application of this hypothesis reduces the divergence between theory and experiment. "The author is grateful to B. L. Ioffe for interest in the work and discussion of the results, and to V. V. Vladimirovskiy for pointing out an error in the work." Orig. art. has: 2 tables, 7 formulas. 44,55

ASSOCIATION: Institut teoreticheskoy i eksperimental'noy fiziki (Institute of Theoretical and Experimental Physics) 44,55

SUBMITTED: 22Feb65

ENCL: 00

SUB CODE: NP

NO REF SOV: 002

OTHER: 008

mlr
Card 2/2

L 41608-55 EWT(1)

ACCESSION NR: AP5006517

8/0056/65/048/002/0673/0683

AUTHOR: Marinov, M. S.; Roginskiy, V. I.

TITLE: Kinematic singularities of helicity amplitudes. Integer spins. 7
B

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 48, no. 2, 1965, 673-683

TOPIC TAGS: helicity amplitude, tensor amplitude, Regge pole, branch point, analytic property, strong interaction 2

ABSTRACT: The article deals with some of the advantages and disadvantages of the helicity representation of the amplitudes of inelastic strong-interaction amplitudes of large-spin particles, in view of the fact that the analytic properties of the functions are much more complicated in the helicity representation. A general connection is derived between the helicity and tensor amplitudes, and used to determine the kinematic singularities (square root branch points).

used to determine the kinematic singularities (square-root branch points, poles, and zeroes) of the helicity amplitudes of processes of the type $1 + 2 \rightarrow 3 + 4$ and $1 \rightarrow 2 + 3$ as functions of the invariant variables. The analysis is restricted

Card 1/2

L 41608-65

ACCESSION NR: AP5006517

to the case of integer spins. "The authors are grateful to K. A. Ter-Martirosyan for interest, a discussion, and criticism." Orig. art. has: 32 formulas.

ASSOCIATION: None

SUBMITTED: 12Aug64

ENCL: 00

SUB CODE: NF

NR REF SOV: 002

OTHER: 003

file
Card 2/2

L 01235-57 EWT(1)

ACC NR: AT6031146

SOURCE CODE: UR/3138/65/000/394/0003/0008

AUTHOR: Marinov, M. S.

6
B+1

ORG: none

TITLE: On the non-negativity of the polarization density matrix

SOURCE: USSR. Gosudarstevnnyy komitet po ispol'zovaniyu atomnoy energii. Institut teoreticheskoy i eksperimental'noy fiziki. Doklady, no. 394, 1965. O neotritsatelnosti polarizatsionnoy matritsy plotnosti, 3-8

TOPIC TAGS: polarization matrix, polarization density matrix, polarization moment, nonnegativity

ABSTRACT: Inequalities are obtained which are satisfied by polarization moments. These inequalities have an invariant form and are a necessary and sufficient condition for the non-negativity of the density matrix. Orig. art. has: 11 formulas. [Author's abstract] [SP]

SUB CODE: 20/ SUBM DATE: none/ ORIG REF: 004/ OTH REF: 001/

Card 1/1

MARINOV, M. S.

"A Simple Method of Determining the Formfactor with Unitary Condition"

report presented at the Intl. Conference on High Energy Physics, Geneva,
1962

Inst. of Theoretical and Experimental Physics, Moscow, USSR

