"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103010010-5

BAGDASARYAN, B. A.

Bagdasaryan, B. A. - "The biology of Bruchidus holosericeus Schonh. in the vicinity of Yerevan", Sbornik nauch. trudov (Yerevansk. gos. un-t im. Molotova), Vol. XXVIII, 1948, p. 73-78, (In Armenian, resume in Russian).

SO: U-4110, 17 July 53, (Letopis 'Zhurnal 'nykh Statey, No. 19, 1949).

APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103010010-5"

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BAGDASARYAN, E. R.

Synthesis of derivatives of p-alkoxybenzoic acids. VI. γ-Dialkylaminopropyl esters of p-alkoxythiobenzoic acids and some of their salts. A. L. Mndzhoyan and E. R. Bagdasaryan. *Doklady Akad. Nauk Armyan. S.S.R.* 19, 47-52(in Russian; Armenian summary, 52)(1954); cf. *C.A.* 50, 245a.—The following $Me_2NCH_2CH_2CH_2SC(O)C_6H_4OR$-*p* are reported without description of the methods of synthesis (*R*, % yield, b.p., d_{20}, n^{20}_D, and m.p. of picrate): *Me*, 86.5, $b_{0.5}$ 182-5°, 1.0982, 1.5618, 138-9°; *Et*, 85.3, b_1 195-8°, 1.0703, 1.5522, 122-3°; *Pr*, 75, $b_{0.5}$ 200-3°, 1.0623, —, 120-8°; *Bu*, 70.2, b_1 205-10°, —, —, 129-30°; *Am*, 80, $b_{0.5}$ 203-6°, 1.0316, 1.5395, 123-4°; *iso-Pr*, 83.25, b_1 188-90°, 1.0334, 1.[illegible]41, 116-18°; *iso-Bu*, 79.9, b_1 216-18°, 1.0415, 1.5395, 12[illegible]4°; *iso-Am*, 87.7, b_1 202-4°, 1.0398, 1.5418, 107-9°. $Et_2N[illegible]CH_2CH_2SC(O)C_6H_4OR$-*p* (as above): *Me*, 77, $b_{0.5}$ 196-[illegible], 1.0527, 1.5464, 115-16°; *Et*, 87.5, $b_{0.5}$ 198-200°, 1.0246, 1.5413, 110-11°; *Pr*, 80, $b_{0.5}$ 205-8°, 1.008, 1.5188, 105-6°; *Bu*, 81.1, $b_{0.5}$ 258-63°, 1.0114, 1.5316, 32-3°; *Am*, 80, $b_{0.5}$ 215-20°, 1.0031, 1.5288, 95-6°; *iso-Pr*, 83.4, $b_{0.5}$ 186-8°, 1.0214, 1.5355, 103-4°; *iso-Bu*, 80.1, $b_{0.5}$ 193-6°, 1.0095, 1.5278, 73-4°; *iso-Am*, 70.1, $b_{0.5}$ 199-204°, 0.9935, 1.5221, 87-8°. The following *HCl salts*, p-$ROC_6H_4C(O)SCH_2CH_2CH_2NR_2'.HCl$ were obtained in 90.5-99% yield (*R*, *R'*, and m.p. given): *Me*, *Me*, 156-7°; *Me*, *Et*, 127-8°; *Et*, *Me*, 138-9°; *Et*, *Et*, 143-4°; *Pr*, *Me*, 115-16°; *Pr*, *Et*, 99-100°; *Bu*, *Me*, 141-2°; *Bu*, *Et*, 92-3°; *Am*, *Me*, 123-[illegible]°; *Am*, *Et*, 80-1°; *iso-Pr*, *Me*, 93-4°; *iso-Pr*, *Et*, 101-2°; *iso-Bu*, *Me*, 140-1°; *iso-Bu*, *Et*, 85-6°; *iso-Am*, *Me*, 105-6°; *iso-Am*, *Et*, 86-7°. Following methiodides p-$ROC_6H_4C(O)SCH_2CH_2CH_2NR_2'MeI$ (*R*, *R'*, and m.p. given) are reported in 80-96% yields: *Me*, *Me*, 180-1°; *Me*, *Et*, 123-4°; *Et*, *Me*, 176-7°; *Et*, *Et*, 93-4°; *Pr*, *Me*, 175-6°; *Pr*, *Et*, 91-2°; *Bu*, *Me*, 103-4°; *Bu*, *Et*, 76-7°; *Am*, *Me*, 142-3°; *Am*, *Et*, 80-1°; *iso-Pr*, *Me*, 127-8°; *iso-Pr*, *Et*, 111-12°; *iso-Bu*, *Me*, 177-8°; *iso-Bu*, *Et*, —; *iso-Am*, *Me*, 134-5°; *iso-Am*, *Et*, —. G. M. K.

(1)

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BAGDASARYAN, E.P.

MNDZHOYAN, A.L.; DIVANYAN, N.M.; MNDZHOYAN, O.L.; BAGDASARYAN, E.P.

Methyl ester of 5-butylmercaptomethylfuran-2-carboxylic acid.
Sint.geterotsikl.soed. no.1:26-27 '56. (MIRA 10:11)
(Furoic acid)

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"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103010010-5

BAGDASARYAN, E.P.

MNDZHOYAN, A.L.; GRIGORYAN, M.T.; MNDZHOYAN, O.L.; BAGDASARYAN, E.P.

β-chloroethyl ester of furan-2-carboxylic acid. Sint.geterotsikl. soed. no.1:74-75 '56. (MIRA 10:11)

(Furoic acid)

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"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103010010-5

BAGDASARYAN, E. A.

1/2

1. Deystvitel'nyy chlen AN Armyanskoy SSR.
2. Laboratoriya farmatsevticheskoy khimii Akademii nauk Armyanskoy SSR.

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"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103010010-5

[illegible]

[illegible] 60.8%, 17[illegible]-5°/4, 0.9789, 1.445, oxalate, 1[illegible]-5°, ethiodide, [illegible]

[illegible]

1.447, methiodide, 100-8°, ethiodide, 148-50°; Me, Et_2N-CH_2CH_2CHMe, 46.15%, 175-8°/2, 0.9976, 1.446, —; Et, $Et_2NCH_2CH_2CHMe$ [illegible] oxalate, 115-17°, methiodide, [illegible] CHMe [illegible] methiodide, 235-7°, ethiodide, 157-9°; Et, Et_2NCH_2CHMe-$CHMe$, 61.4%, 182-7°/4, 0.9748, 1.445, oxalate, 128-30°, methiodide, 124-6°, ethiodide, 154-6°; Me, $Et_2NCH_2CMe_2$-CH_2, 64.2%, 197-200°/3, 0.9781, 1.442, [illegible] Et, Et_2NCH_2-[illegible]

[illegible]

10°, methiodide, 124-6°, ethiodide, 157-9°; Me, Et_2NCH_2-$CHCH_2NEt_2$, 56.3%, 190°/3, 0.9877, 1.447, —; Et, Et_2-$NCH_2CHCH_2NEt_2$, 80.22%, 200-5°/6, 0.9932, 1.446, [illegible] methiodide, [illegible] [illegible] M. Kozlapoff

2/2

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"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103010010-5

BAGDASARYAN, E.R.

MNDZHOYAN, A.L.; MNDZHOYAN O.L.; BAGDASARYAN, E.R.

Research on furan derivatives. Report 8. Dokl. AN Arm. SSR. 23 no.4:175-181 '56. (MIRA 10:1)

1. Deystvitel'nyy chlen Akademii nauk Armyanskoy SSR (for A.L. Mndzhoyan) 2. Laboratoriya farmatsevticheskoy khimii Akademii nauk Armyanskoy SSR.

(Furan)

APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103010010-5"

"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103010010-5

MNDZHOYAN, O.L.; BAGDASARYAN, E.R.; GRIGORYAN, A.N.

Diethyl ester of furfurylidenemalonic acid. Sint. geterotsikl. soed. no. 2:40-42 '57. (MIRA 11:7)
(Furanmalonic acid)

APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103010010-5"

"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103010010-5

MNDZHOYAN, A.L., akademik; MNDZHOYAN, O.L.; BAGDASARYAN, E.R.

Research in the field of furan derivatives. Report No.22: Some dialkylaminoethyl esters of furylalkyl and furyl p-alkoxyphenyl carbinols. Dokl. AN Arm.SSR 29 no.1:41-47 59. (MIRA 12:11)

1. Institut tonkoy organicheskoy khimii Akademii nauk Armyanskoy SSR. 2. AN Armyanskoy SSR (for A.L. Mndzhoyan).
(Furan) (Methanol)

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"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103010010-5

MNDZHOYAN, O.L.; BAGDASARYAN, E.R.

Tetrahydrofurfurylbenzylacetic acid. Sint. geterotsikl. soed. no.4:77-80 '59. (MIRA 13:11)

(Hydrocinnamic acid)

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"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103010010-5

MNDZHOYAN, O.L.; BAGDASARYAN, E.R.

Derivatives of substituted acetic acids. Report No.24: Dialkylaminoalkyl esters of p-alkoxybenzilphenylacetic acids. Izv.AN Arm. SSR. Khim.nauki 15 no.4:371-377 '62. (MIRA 15:11)

1. Institut tonkoy organicheskoy khimii AN Armyanskoy SSR.

(Acetic acid)

APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103010010-5"

"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103010010-5

BAGDASARIAN, G

KORZYBSKI T., BAGDASARIAN G.

Szybka chemiczna metoda oznaczania penicyliny. [Rapid method for quantitative determination of penicillin] Med. dosw. mikrob. 1:4 1949 p. 632-8.

1. Of the National Institute of Hygiene.
CLML Vol. 20, No. 2 Feb 1951

APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103010010-5"

"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103010010-5

BAGDASARYAN, G.

WOZNICKA W., BAGDASARJAN G., PIRYLOWICZ W.

Badania nad wydalaniem streptomycyny z ustroju chorych, leczonych streptomycyna. /Studies on excretion of streptomycin by patients treated with it/ Med. dosw. mikrob. 1:4 1949 p. 639-52.

1. Of the National Institute of Hygiene and of the Department of the Polish Tuberculosis Institution of Wolski Hospital in Warsaw.
CIML Vol 20, No. 2 Feb 1951

APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103010010-5"

"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103010010-5

BAGDASARIAN, G.; KURYLOWICZ, W.; WOZNICKA, W.

Chemical and biologic methods of determination of streptomycin in organic fluids. Med.dosw.mikrob. 2 no.2:172-173 1950. (CLML 20:6)

1. Summary of report given at 10th Congress of the Polish Microbiological and Epidemiological Society held in Gdansk, Sept 1949. (Warsaw.)

APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103010010-5"

"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103010010-5

BAGDASARIAN G. , KORZYBSKI T.

Badania nad jodometryczna metoda oznaczania peniqyliny.
/Investigations on the iodometric method of penicillin determination/ Med. dosw. mikrob. 2:3-4 1950 p. 468-89.

1. OC the National Institute of Hygiene in Warsaw.
CMIL Vol. 20, No. 10 Oct 1951

APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103010010-5"

"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103010010-5

BAGDASAR'YAN, G.A. (Moskva)

Role of the external environment in the incidence of poliomyelitis. Fel'd. i akush. 25 no.3:3-6 Mr '60. (MIRA 13:6)
(POLIOMYELITIS) (MAN--INFLUENCE OF ENVIRONMENT)

APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103010010-5"

"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103010010-5

BAGDASAR'YAN, G.A.

Role of sewage and irrigation fields in the incidence of poliomyelitis; survey of the literature. Zhur.mikrobiol.epid.i immun. 32 no.2:84-87 F '61. (MIRA 14:6)

1. Iz Instituta obshchey i kommunal'noy gigiyeny imeni Sysina AMN SSSR.

(POLIOMYELITIS) (SEWAGE IRRIGATION)

APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103010010-5"

"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103010010-5

ZEYTLENOK, N.A.; LOVTSEVICH, Ye.L.; BAGDASAR'YAN, G.A.

Different reaction of attenuating and virulent strains of poliomyelitis virus to the action of chlorine and soil adsorbents. Vop. virus. 7 no. 1:83-87 Ja-F '61. (MIRA 14:4)

1. Institut po izucheniyu poliomiyelita AMN SSSR, Moskva.
(POLIOMYELITIS) (CHLORINE) (SOILS—MICROBIOLOGY)

APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103010010-5"

"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103010010-5

BAGDASARYAN, G.A., mladshiy nauchnyy sotrudnik

Survivability of the poliomyelitis virus and other enteroviruses on vegetables. Gig. i san. 27 no.3:97-99 Mr '62. (MIRA 15:4)

1. Iz Instituta obshchey i kommunal'noy gigiyeny imeni A.N.Sysina AMN SSSR i Instituta poliomyelita i virusnykh entsefalitov AMN SSSR.
(POLIOMYELITIS) (VEGETABLES--MICROBIOLOGY)

APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103010010-5"

"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103010010-5

BAGDASAR'YAN, G.A.

Materials form laboratory studies of the survival in the soil of some enteroviruses (poliomyelitis, ECHO, Coxsackie). Vop.virus.7 no.5:551-554 S-O '62. (MIRA 15:11)

1. Institut obshchey i kommunal'noy gigiyeny imeni A.N.Sysina AMN SSSR i Institut poliomiyelita i virusnykh entsefalitov AMN SSSR, Moskva.

(SOILS--MICROBIOLOGY) (ECHO VIRUSES)
(COXSACKIE VIRUSES) (POLIOMYELITIS VIRUSES)

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"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103010010-5

BAGDASARYAN, G.A.

Survival of viruses of the enterovirus group (Poliomyelitis, ECHO, Coxsackie) in soil and on vegetables. J. hyg. epidem. (Praha) 8 no.4:497-505 '64.

1. Sysin Memorial Institute of General and Community Hygiene, Academy of Medical Sciences of the USSR, Moscow.

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"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103010010-5

BAGDASARYAN, G.A., inzh.

Storage and transportation of flour without containers. Mekh. i avtom. proizv. 18 no.12:31 D '64. (MIRA 18:3)

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"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103010010-5

S/020/60/133/006/027/031XX
B016/B054

AUTHORS: Babayan, A. T., Indzhikyan, M. G., and Bagdasaryan, G. B.

TITLE: Formation of Conjugate Diene Amines During the Interaction of Mono- and Diquaternary Salts of 1,4-Diamines With Aqueous Alkali

PERIODICAL: Doklady Akademii nauk SSSR, 1960, Vol. 133, No. 6, pp. 1334-1336

TEXT: The authors report on their investigations of the reactions of mono- and diquaternary salts of 1,4-di-(dimethyl-amino)-2-methyl butene-2. They attempted to find out whether the double 1,4-cleavage of the di-ammonium salt takes place simultaneously or by steps. The authors proved that the protonization of the hydrogen atoms of C_4 is suppressed by the conjugation of the methyl group. Thus, the order of the mentioned cleavage reactions is predetermined according to scheme (I).

Card 1/6

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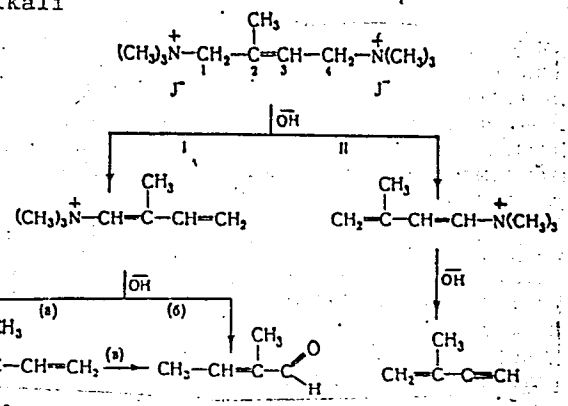
Formation of Conjugate Diene Amines During the Interaction of Mono- and Diquaternary Salts of 1,4-Diamines With Aqueous Alkali

S/020/60/133/006/027/031XX
B016/B054

Д 133, 6 p. 1334
Scheme
A



This statement by the authors is based on the results of their experiments. From the products of the reaction of the iodine salt of 1,4-di-(trimethyl-ammonium)-2-methyl butene-2 with aqueous alkali, they isolated an aldehyde (corresponding to the dimer of methyl crotonic aldehyde), as well as a high-boiling amine product (apparently a condensation product of methyl crotonic aldehyde with 1-dimethyl-amino-(methyl)-butadiene). The same

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Formation of Conjugate Diene Amines During the Interaction of Mono- and Diquaternary Salts of 1,4-Diamines With Aqueous Alkali

S/020/60/133/006/027/031XX
B016/B054

result was obtained in the transition from a mixture of quaternary ammonium salt with alkali to an ammonium base. The authors did not succeed (contrary to a statement made by Ya. M. Slobodin, Ref. 5) in detecting even traces of 2-methyl vinyl acetylene in the reaction products. This fact speaks in favor of scheme I. The authors further cleft the monoiodo methyl derivative of 1,4-di-(dimethyl-amino)-2-methyl butene-2 by aqueous alkali at a lower temperature (120°C). Here, the same products were formed as in the cleavage of the diquaternary salt. Subsequently, the authors cleft - in vacuo and at 105-107°C - the hydroxide they had produced by treating the monoiodo methylate of 1,4-di-(dimethyl-amino)-2-methyl butene-2 with an aqueous suspension of the silver oxide. Here, they isolated 1-dimethyl-amino-2-methyl butadiene-1,3 (yield about 40% of the theoretical one). The properties of this substance are described. From the fact that this substance forms dimethyl amine, as well as a corresponding derivative of α-methyl crotonic aldehyde, with the solutions of semicarbazide, 2,4-dinitro-phenyl hydrazine, and hydroxylamine, the authors conclude that the methyl in the diene amine takes a β-position with respect to the amino group:

Card 3/6

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"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103010010-5

Formation of Conjugate Diene Amines During the Interaction of Mono- and Diquaternary Salts of 1,4-Diamines With Aqueous Alkali

S/020/60/133/006/027/031XX
B016/B054

$$(CH_3)_2N-CH=\overset{CH_3}{\overset{|}{C}}-CH=CH_2;$$

consequently, the position of the methyl in the monoiodo methylate used is:

$$(CH_3)_2N-CH_2-\overset{CH_3}{\overset{|}{C}}=CH-CH_2-\overset{+}{N}(CH_3)_2.$$

On the basis of these results, the authors assume that the second cleavage step of diiodo methylate (step (a) of scheme I) requires a higher temperature (140-145°C) than was hitherto applied. To settle this question, they studied the behavior of two other diquaternary ammonium salts (I) and (II) towards aqueous alkali. It was proved that the alkaline cleavage of (I) already occurred at the temperature of the boiling water bath (see scheme B). The similar cleavage of (II) is illustrated by scheme C. Thus, the authors proved that the diquaternary ammonium salts (I) and (II) are cleft by alkali according to scheme I, i.e., exclusively via step (a) (see scheme A). There are 5 Soviet references.

Card 4/6

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"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103010010-5

Formation of Conjugate Diene Amines During the Interaction of Mono- and Diquaternary Salts of 1,4-Diamines With Aqueous Alkali

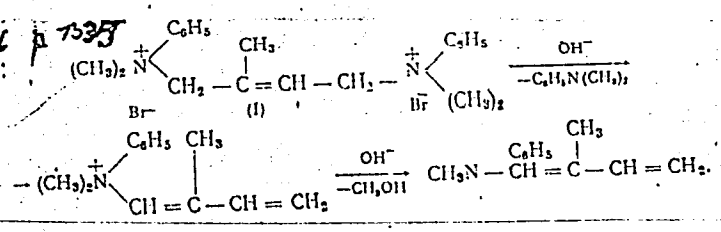
S/020/60/133/006/027/031XX
B016/B054

ASSOCIATION: Institut organicheskoy khimii Akademii nauk ArmSSSR (Institute of Organic Chemistry of the Academy of Sciences Armyanskaya SSR)

PRESENTED: April 12, 1960, by I. L. Knunyants, Academician

SUBMITTED: April 10, 1960

D 133,6 p 1335
Schema B



Card 5/6

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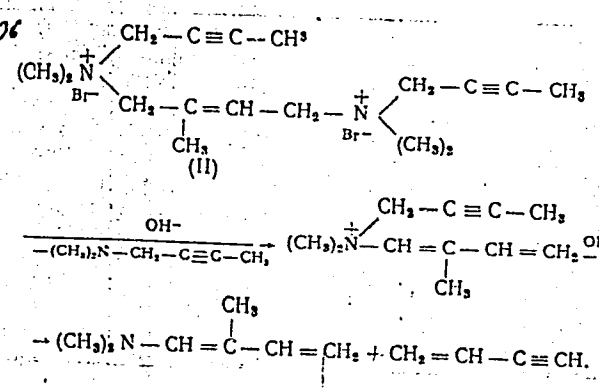
S/020/60/133/006/027/031XX
B016/B054

D, 133, 6, p. 1336

Scheme C.



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"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103010010-5

BABAYAN, A.T.; INDZHIKYAN, M.G.; BAGDASARYAN, G.B.

New reaction of the rearrangement and splitting of quaternary ammonium salts. Dokl. AN Arm. SSR 34 no.2:75-82 '62. (MIRA 15:4)

1. Institut organicheskoy khimii AN Armyanskoy SSR. 2. Chlen-korrespondent AN Armyanskoy SSR (for Babayan).
(Ammonium salts)

APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103010010-5"

"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103010010-5

BABAYAN, A.T.; INDZHIKYAN, M.G.; BAGDASARYAN, G.B.

Amines and ammoniu compounds. Part 21: Rearrangement-cleavage of ammonium salts containing α, β-and $\beta\gamma$-unsaturated groups. Zhur.ob.khim. 34 no. 2:411-415 F '64. (MIRA 17:3)

1. Institut organicheskoy khimii AN Armyanskoy SSR.

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"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103010010-5

BABAYAN, A.T.; INDZHIKYAN, M.G.; BAGDASARYAN, G.B.; DAVTYAN, N.M.

Amines and ammonium compounds. Part 22: Rearrangement-cleavage of ammonium salts containing -chloroethyl and allyl-type groups taking place under the effect of aqueous alkali. Zhur.ob.khim. 34 no.2:416-421 F '64. (MIRA 17:3)

1. Institut organicheskoy khimii AN ArmSSR.

APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103010010-5"

"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103010010-5

BABAYAN, A.T.; INDZHIKYAN, M.G.; BAGDASARYAN, G.B.

Amines and ammonium compounds. Part 29: Alkaline decomposition piperazinium salts containing the allyl-type group. Izv. AN Arm.SSR. Khim.nauki 18 no.4:347-350 '65.

(MIRA 18:12)

1. Institut organicheskoy khimii AN Armyanskoy SSR. Submitted March 21, 1964.

APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103010010-5"

"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103010010-5

BAGDASARYAN, G.P.

Nepheline-syenites of the Pambak Range [with summary in English]. Izv.AN Arm.SSR.Est.nauki no.1:19-35 '47. (MLRA 9:8)

1. Institut geologicheskikh nauk AN Armyanskoy SSR.
(Pambak Range--Rocks, Igneous)

APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103010010-5"

"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103010010-5

USSR

Alkalic pegmatites of Central Armenia. G. P. Bagdasaryan. *Doklady Akad. Nauk Armyan. S.S.R.* 19, 117-21 (1954) (in Russian).—The pegmatites described are genetically and locally connected with the Tashsarsk intrusions. Mineralogically, these pegmatites consist of K feldspar 40-50%, nepheline 35-40%, alk. amphibole and pyroxene 8-15%, melanite garnet 0-10%, and accessories (sphene, fluorite, zircon, apatite, etc.). Alkalic pegmatites are comparatively rare and do not fit into A. E. Fersman's classification which, while generally accepted, holds only for the much commoner acid (granite) pegmatites, as does also the very recent classification proposed by K. A. Vlasov. B believes that the Vlasov scheme might be extended to include also the alkalic pegmatites. V. H. Gottschalk

APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103010010-5"

"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103010010-5

BAGDASARYAN, G.P.

GP

Petrogenetic particularities of porphyritic syenito-granites in the Amzachimansk Intrusion, Armenian S.S.R. G. P. Bagdasaryan. *Izvest. Akad. Nauk Armyan. S.S.R., Ser. Fiz.-Mat., Estestven. i Tekh. Nauk* 8, No. 2, 45-61(1955)(in Russian; Armenian summary).—After describing the geographical position of the Amzachimansk intrusion (I), its age and its morphology, the petrographic characterization of porphyritic syenito-granites (II) in I is given and the genesis of II is discussed. Elisabeth Barabash

APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103010010-5"

"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103010010-5

BAGDASARYAN, G. P.

Petrography of alkaline igneous rocks of Armenian S. S. R. G. P. Bagdasaryan (Inst. Geol. Sci., Erevan). *Izvest. Akad. Nauk Armyanskoy S.S.R., Ser. Geol.* 1956, No. 2, 20-30.—A report of petrographic properties, conditions of formation, and genesis of igneous rocks of Armenian S. S. R. A table of rock analyses is given, as are photomicrographs of the rocks studied.

Gladys E. Macy

APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103010010-5"

"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103010010-5

BAGDASARYAN, G. P.

USSR/Cosmochemistry. Geochemistry. Hydrochemistry. D

Abs Jour : Referat. Zhurnal Khimiya. No 6. 1957. 18941.

Author : G.P. Bagdasaryan, A.T. Veguni.
Inst : Academy of Sciences of Armenian SSR.
Title : Lithology and Conditions of Formation of Paleocene Deposits on Khvalynskiy Right Bank of Volga.

Orig Pub : Izv. AN ArmSSR. Fiz.-Matem., Yestestv. i Tekhn. N., 1956, 9, No 4, 33-54.

Abstract : The comparison of results of chemical analyses of investigated sands and sandstones shows an extreme similarity of their chemical composition. The same was found at the comparison of their schlich and mineralogical compositions. On these grounds the author surmises that the genesis of sandstones has been connected with the diagenesis of sands.

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"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103010010-5

BAGDASARYAN, G.P.

The contact and postmagmatic phenomena related to complex alkaline rocks in central Armenia. G. P. Bagdasaryan. *Izvest. Akad. Nauk Armyan. S.S.R., Fiz.-Mat., Estestven. i Tekh. Nauki* 9, No. 8, 37-53(1956)(in Russian).—The rocks of contact zones of Tejsar consist of skarn marble, hybrid rock and contact hornstone. The post-magmatic processes related to intrusion are: (a) albitization, pelitization, and sericitization of the feldspar; (b) zeolitization, [illegible] of nepheline and pseudo-leucite syenites accompanied by formation of analcime, rarely sodalite; (c) substitution of monoclinic pyroxene by hornblende and biotite and [illegible] of epidote, calcite, and magnesite; (d) substitution of the primary and secondary hornblende by biotite and other minerals; (e) pyritization. Chem. analyses are given.

— M. Charmandarian

Inst. Geol. Sci., AS Arm SSR

APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103010010-5"

"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103010010-5

BAGDASARYAN, G.P.

Recent data on the age of certain intrusive masses in Armenia. Dokl. AN Arm. SSR 28 no.2:85-90 '59. (MIRA 12:6)

1. Institute geologicheskikh nauk AN ArmSSR. Predstavlena akademikom AN ArmSSR S.S. Mkrtchyanom.
(Armenia--Rocks, Igneous)

APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103010010-5"

"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103010010-5

BAGDASARYAN, G.P.; GUKASYAN, R.Kh.

Age of Paleozoic intrusions in the Armenian S.S.R. Izv. AN Arm.SSR.Geol.i geog.nauki 14 no.4:23-36 '61. (MIRA 14:9)

1. Institut geologicheskikh nauk AN Armyanskoy SSR.
(Armenia--Geological time)

APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103010010-5"

"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103010010-5

BAGDASARYAN, G.P.; GUKASYAN, R.Kh.; MNATSAKANYAN, A.Kh.

Recent data on the geochronological scale of absolute chronology according to the materials of the Armenian S.S.R. Dokl. AN Arm. SSR 33 no.4:181-185 '61. (MIRA 15:1)

1. Institut geologicheskikh nauk AN Armyanskoy SSR. Predstavleno akademikom AN Armyanskoy SSR K.N.Paffengol'tsem.
(Geological time)

APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103010010-5"

"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103010010-5

BAGDASARYAN, G.P.

"The Tezharsk alcaline subvolcano."

[illegible] presented at the 12th General Assembly of the [illegible], Helsinki, July 1960.

APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103010010-5"

"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103010010-5

BAGDASARYAN, G.P.

Achievements of petrographic studies in the Armenian S.S.R.
Iz ist.est.i tekh. 2:278 '62. (MIRA 18:4)

APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103010010-5"

"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103010010-5

ABOVYAN, S.B.; BAGDASARYAN, G.P.; KAZARYAN, G.A.; KARAPETYAN, K.I.; MALKHASYAN, E.G.; MELIKSETYAN, B.M.; MNATSAKANYAN, A.Kh.; CHIBUKHCHYAN, Z.O.; SHIRINYAN, K.G.; MELKONYAN, R.L., otv. red.; CHAKHALYAN, TS., tekhn. red.; NUNYAN, S., tekhn. red.

[Chemical composition of igneous and metamorphic rocks in the Armenian S.S.R.] Khimicheskie sostavy izverzhennykh i metamorficheskikh gornykh porod Armianskoi SSR. [By] S.B. Abovian i dr. Erevan, Izd-vo Akad. nauk Armianskoi SSR, 1962. 433 p. (MIRA 16:2)

1. Akademiya nauk Armyanskoy SSR, Erivan. Institut geologicheskikh nauk.

(Armenia—Rocks, Igneous--Analysis)
(Armenia—Rocks, Crystalline and metamorphic--Analysis)

APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103010010-5"

"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103010010-5

BAGDASARYAN, G.P.; CHIBUKHCHYAN, Z.O.

Petrography and conditions governing the formation of the Lermontovo gabbroic intrusive. Zap.Arm.otd.Vses.min.ob-va no.2: 103-117 '63. (MIRA 16:10)

APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103010010-5"

"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103010010-5

BARATOV, R.B.; BAGDASARYAN, G.P.; MEL'NICHENKO, A.K.; GUKASYAN, R.Kh.

Absolute age of the biotites of porphyry like granites in the Varzob Basin (southern Gissar Range). Dokl. AN Tadzh. SSR 6 no.5:28-30 '63. (MIRA 17:4)

1. Institut geologii AN Tadzhikskoy SSR. 2. Chlen-korrespondent AN Tadzhikskoy SSR (for Baratov).

APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103010010-5"

"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103010010-5

AFANAS'YEV, G.D.; BAGDASARYAN, G.P.; GARRIS, M.A.; KHAMRABAYEV, I.Kh.

Materials on dating the boundaries between some geological systems and epochs. Izv. AN SSSR. Ser. geol. 28.no.11: 7-31 N'63. (MIRA 17:2)

1. Institut geologii rudnykh mestorozhdeniy, petrografii, mineralogii i geokhimii AN SSSR, Moskva.

APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103010010-5"

"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103010010-5

ARAKELYAN, R.A.; VEGUNI, A.T.; BAL'YAN, S.P.; SAYADYAN, Yu.V.; ASRATYAN, V.P.; BAGDASARYAN, G.P.; MALKHASYAN, E.G.; ARUTYUNYAN, A.R.; ARUTCHYAN, A.G., red.; ASLANYAN, A.T.,red.; GOGINYAN, V.Y., red.; GULYAN, E.Kh., red.; KAZARYAN, S.V.,red.; MKRTCHYAN, K.A., red.; TSAMERYAN, P.P., red.

[Study of the geology of the U.S.S.R.] Geologicheskaia izuchennost' SSSR. Erevan, Izd-vo AN Arm. SSR Vol.48. No.1. 1964. 157 p. (MIRA 18:6)

APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103010010-5"

"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103010010-5

BAGDASARYAN, G.P.; SUKASYAN, R.Kh.

Absolute age of some igneous rocks in Eastern Siberia. Geol. i geofiz. no.4:175-178 '65. (MIRA 18:8)

1. Institut geologicheskikh nauk AN Armyanskoy SSR, g. Yerevan.

APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103010010-5"

"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103010010-5

BAGDASAR'YAN, G.S., inzh.

Draining the Lebedi strip mine of the Kursk Magnetic Anomaly. Mont. i spets. rab. v stroi. 25 no.3:5-8 Mr '63. (MIRA 16:3)

1. Trest Soyuzshakhtoosusheniye.
(Kursk magnetic anomaly—Drainage)

APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103010010-5"

"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103010010-5

LEYFEROV, Mikhail Yakovlevich; BAGDASAR'YAN, Georgiy Stepanovich; FUKSON, M.N., otvetstvennyy redaktor; SMIRNOV, L.V., redaktor izdatel'stva; NADEINSKAYA, A.A., tekhnicheskiy redaktor

[The "LIU-2" needle pump for lowering around water] Iglofil'trovaia vodoponizitel'naia ustanovka LIU-2. Moskva, Ugletekhizdat, 1956. 37 p.

(Pumping machinery) (MIRA 10:1)

APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103010010-5"

"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103010010-5

BAGDASAR'YAN, G.S., inzhener; KHEYSTVER, N.L., inzhener.

Using light borehole filter pumps in open pit mining. Mekh.trud.rab. 10 no.10:25-26 O '56. (MIRA 10:1)

(Strip mining) (Mine pumps)

APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103010010-5"

"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103010010-5

L 21114-65 EWP(m)/EWA(h)/EWP(k)/EWT(d)/EWT(1)/EWT(m)/FCS(k)/EWA(d)/EWA(1)/EWP(w)/EWP(v) Pd-1/Pf-4/Peb ASD(f)-3/AFTC(p) EM

ACCESSION NR: AP5002595 S/0179/64/000/005/0077/0082

AUTHOR: Ambartsumyan, S. A. (Yerevan); Bagdasaryan, G. Ye. (Yerevan)

TITLE: Flutter of a cylindrical shell in a high-temperature field

SOURCE: AN SSSR. Izvestiya. Mekhanika i mashinostroyeniye, no. 5, 1964, 77-82

TOPIC TAGS: cylindrical shell, cylindrical shell flutter, shell flutter speed, infinite plate, flutter speed, plate flutter, plate flutter speed

ABSTRACT: The flutter of an infinite circular cylindrical shell in a longitudinal supersonic high-temperature gas flow is analyzed. It is assumed that only the elasticity modulus of the shell material varies with the time-dependent temperature. The analysis is based on the Kirchhoff-Love hypothesis on preservation of normals and on the Neumann hypothesis on the absence of shear in an infinitely small shell element subjected to temperature variation; conventional simplifications of the theory of shells with a large index of variation are used. An expression for determining the critical (flutter) speed at any instant

Card 1/2

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"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103010010-5

L 21114-65
ACCESSION NR: AP5002595

of a given time interval is derived for the case when the elasticity modulus varies linearly with temperature and the temperature linearly with time. The procedure of extending the results obtained to an infinite plate is indicated and formulas for the flutter speed are deduced. Orig. art. has: 39 formulas.

ASSOCIATION: none

SUBMITTED: 14Apr64 ENCL: 00 SUB CODE: AS, ME

NO REF SOV: 010 OTHER: 001 ATD PRESS: 3164

Card 2/2

APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103010010-5"

"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103010010-5

AMBARTSUMYAN, S.A.; BAGDASARYAN, G.Ye.

Flutter of a plate located in a temperature field. Dokl. AN Arm. SSR 39 no. 3:141-147 '64. (MIRA 18:1)

1. Institut matematiki i mekhaniki AN ArmSSR. 2. Chlen-korrespondent AN ArmSSR (for Ambartsumyan).

APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103010010-5"

"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103010010-5

BAGDASARYAN, G.Yo.

Stability of an anisotropic layered cylindrical shell in a hypersonic gas flow. Dokl. AN Arm. SSR 39 no.5:271-278 '64. (MIRA 18:2)

1. Institut matematiki i mekhaniki AN ArmSSR. Submitted May 20, 1964.

APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103010010-5"

"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103010010-5

L 39389-65 EWP(m)/EPR/EWA(h)/EWP(k)/[illegible]

SOURCE: AN ArmSSR. Doklady, v. 39, no. 5, 1964, 271-278

TOPIC TAGS: gas flow, supersonic flow, flutter, critical velocity

ABSTRACT: The article considers a circular cylindrical shell of infinite length and constant thickness, made up of an arbitrary number of homogeneous and anisotropic media, located in a supersonic stream of compressible gas flowing in a direction parallel to the shell axis. The hypothesis of undeformed normals is deemed applicable to the entire packet of layers making up the shell, with particular attention given to the case of orthotropic layers whose principal geometrical and physical directions do not coincide. Solutions of the quations of motion yield the critical flutter velocity. The stability of the solutions is discussed. The results show that in the case of an orthotropic shell the critical flutter

Card 1/2

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"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103010010-5

L 39389-65

ACCESSION NR: AP5004281

velocity depends noticeably on the orientation of the principal elasticity directions of the shell-layer material, and is a periodic function of the angle [illegible] tions for minimization of the flutter velocity are discussed. Orig. art. has: [illegible]

[illegible]

NR REF SOV: [illegible] OTHER: [illegible]

Card 2/2

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"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103010010-5

L 26335-65 EWT(d)/EWT(m)/EWP(w)/EWA(d) AFFTC/APGC EM

ACCESSION NR: AP5002648 S/0252/64/039/003/0141/0147

AUTHORS: Ambartsumyan, S. A. (Corresponding member AN ArmSSR); Bagdasaryan, G. Ye.

30
13
B

TITLE: Flutter in a plate in a temperature field

SOURCE: AN ArmSSR. Doklady, v. 39, no. 3, 1964, 141-147

24

TOPIC TAGS: flutter, flat plate, thermal stress, vibration effect, supersonic vibration, elastic modulus, critical velocity

26 26

ABSTRACT: The article deals with an isotropic plate of constant thickness, oriented in a Cartesian system x, y, z in such a way that the mid-plane of the undeformed plate coincides with the coordinate plane xy. It is assumed that only the modulus of elasticity of the material depends on the temperature, which varies only in the z direction and in time. A supersonic stream of compressible gas, with unperturbed velocity directed along the ox axis, is assumed

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"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103010010-5

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ACCESSION NR: AP5002648

to flow around the plate. The authors solve the differential equation of motion of this plate under certain assumptions concerning zero deformation in the normal direction, zero shear due to change in temperature in an infinitesimally small element of the plate, and the "law of plane sections" in the determination of the aerodynamic pressure. It is shown that the time behavior of the displacement (the flutter) depends both on the velocity of the incoming stream and on the variation of the modulus of elasticity with time and temperature. An analysis of all these factors shows that the dynamic critical velocity of the flutter is smaller than the critical velocity obtained from the quasistatic theory, and in the case of sufficiently small damping the difference between the two can be quite large. Orig. art. has: 37 formulas.

ASSOCIATION: Institut matematiki i mekhaniki Akademii nauk Armyanskoy SSR (Institute of Mathematics and Mechanics, Academy of Sciences ArmSSR)

APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103010010-5"

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L 26335-65

ACCESSION NR: AP5002648

SUBMITTED: 02Apr64 ENCL: 00 SUB CODE: AS, ME

NR REF SOV: 008 OTHER: 001

APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103010010-5"

"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103010010-5

BAGDASARYAN, G.Ye.; GNUNI, V.TS.

Nonlinear problem of the stability of an anisotropic cylindrical shell. Izv. AN Arm. SSR. Ser.fiz.-mat.nauk 18 no.2:32-38 '65. (MIRA 18:6)

1. Institut matematiki i mekhaniki AN Armyanskoy SSR.

APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103010010-5"

"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103010010-5

L 14634-66 EWT(d)/EWT(m)/EWP(w)/EWP(v)/EWP(k)/EWA(h)/ETC(m)-6 IJP(c)
ACC NR: AP6002674 WW/EM SOURCE CODE: UR/0252/65/041/004/0199/0203

AUTHOR: Bagdasaryan, G. Ye.; Gnuni, V. Ts.

ORG: Institute of Mathematics and Mechanics, Academy of Sciences, Armenian SSR (Institut matematiki i mekhaniki Akademii nauk Armyanskoy SSR)

TITLE: Oscillations of a cylindrical shell filled with a liquid of variable depth

SOURCE: AN ArmSSR. Doklady, v. 41, no. 4, 1965, 199-203

TOPIC TAGS: shell theory, cylindrical shell structure, shell structure dynamics, shell vibration

ABSTRACT: The paper presents a theoretical discussion of the oscillation of a circular cylindrical shell filled to a variable depth with an incompressible fluid. The mean surface of the thin shell serves as the coordinate plane and the shell is assumed to satisfy the hypothesis of nondeforming normals (V. Z. Vlasov, Obshchaya teoriya obolochek, Gostekhizdat, 1949). It is also assumed that the wave motion on the free surface of the liquid has only a slight effect on the oscillations of the shell. The calculation is based on shell oscillation and potential liquid motion equations which are transformed into a system of ordinary differential equations with variable coefficients by means of the Bubnov-Halerkin variation method. It is shown that under certain conditions the depth variation of the liquid may lead to a decrease or increase in the natural frequency of the shell. Orig. art. has: 17 formulas. [08]

Card 1/2

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"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103010010-5

L 14634-66

ACC NR: AP6002674

SUB CODE: 20/ SUBM DATE: none/ ORIG. REF: 003/ OTH REF: 001/ ATD PRESS: 4198

Card 2/2

APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103010010-5"

"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103010010-5

L 23069-66 EWT(m)/EWP(w)/ETC(m)-6 IJP(c) WW/EM

ACC NR: AP6011330 SOURCE CODE: UR/0198/66/002/003/0021/0026

AUTHOR: Bagdasaryan, G. Ye. (Yerevan); Gnuni, V. Ts. (Yerevan)

ORG: Institute of Mathematics and Mechanics, AN ArmSSR (Institut matematiki i mekhaniki, AN ArmSSR)

TITLE: Parametric vibrations of a cylindrical shell filled with liquid of a variable depth

SOURCE: Prikladnaya mekhanika, v. 2, no. 3, 1966, 21-26

TOPIC TAGS: vibration theory, parametric vibration, parametric resonance, cylindrical shell vibration, shell liquid system

ABSTRACT: The problem of the parametric vibration of a circular cylindrical shell with constant wall thickness filled with incompressible liquid of variable depth is analyzed under the assumption that the shell is acted upon by longitudinal parametric force $P_0 + P_1 \cos\theta t$ and internal pressure q. A system of equations expressing the dynamic stability of a shell (equation for the deflection w and the stress function Φ) and the equation for the potential function ϕ of the disturbed liquid motion with certain boundary conditions are written, using the following simplifying assumptions: 1) the Kirchhoff-Love hypothesis on preservation of normals; 2) well known simplifications in the theory of shells with a large index of variation; 3) the motion of a liquid in a shell is potential; 4) the wave motion of the free surface of a liquid

Card 1/2

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"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103010010-5

L 23069-66

ACC NR: AP6011330

has very little effect on the vibration of the shell. Assuming that the end of the shell is hinged, w and Φ are written in the form of finite trigonometric series with unknown functions $W_s(t)$ and $\Phi_s(t)$ ($t = 0, 1, \ldots, n$). It is shown that $\Phi_s(t)$ as well as all vibration characteristics can be expressed in terms of $W_s(t)$. A system of ordinary differential equations for determining the function $W_s(t)$ is derived from the equations of the dynamic stability of the shell, using the Bubnov-Galerkin variational method. The case N = 0 is investigated in more detail. Equations for determining the critical values of the parametric resonance of a shell filled with a liquid of variable depth are derived. Orig. art. has: 29 formulas. [LK]

SUB CODE: 20/ SUBM DATE: 26Apr65/ ORIG REF: 003/ OTH REF: 001/ ATD PRESS: 4234

Card 2/2

APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103010010-5"

"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103010010-5

ACC NR: AP7002691 SOURCE CODE: UR/0424/66/000/006/0050/0056

AUTHOR: Bagdasaryan, G. Ye. (Yerevan); Belubekyan, M. V. (Yerevan)

ORG: Institute of Mathematics and Mechanics, Academy of Sciences, Armenian SSR (Institut matematiki i mekhaniki AN ArmSSR)

TITLE: Flutter of a cylindrical shell in a flow of a compressible conductive fluid in presence of a magnetic field

SOURCE: Inzhenernyy zhurnal. Mekhanika tverdogo tela, no. 6, 1966, 50-56

TOPIC TAGS: cylindric shell structure, shell flutter, ~~dynamic~~ shell structure stability, magnetic field, ~~critical flutter~~, aero magneto flutter, aero elastic flutter, shell vibration, supersonic flow, gas flow, fluid flow, compressible fluid

ABSTRACT: The dynamic stability of an infinite circular cylindrical shell is investigated in an outer longitudinal supersonic flow of an electrically perfectly conductive inviscid gas with a certain undisturbed velocity at infinity. Inside the shell the gas is at rest under pressure equal to that of the undisturbed gas flow. There is an outer magnetic field parallel to the shell axis. The investigation is carried out assuming the validity of the following assumptions: 1) Kirchhoff-Love hypothesis on nondeformable normals; 2) conventional simplifications in the theory of shells with a large index of variation; 3) disregard of the electromagnetic effects in the shell; 4) equality to unity of the magnetic and dielectric permeabilities of the gas and of the shell material; 5) correctness of the Maxwell equations for the vacuum in the inner space of the shell. The following initial

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equations and relationships are used in accordance with these assumptions: a) the equations of magnetogasdynamics for the outer space of the shell; b) the equation of the shell motion; c) an expression for the normal component of the outer surface load; and d) the equations of the magnetic and electric fields in the vacuum. Equations (a) and (d) are linearized on the assumption that the disturbances are small, and linearized equations (e) are obtained which describe the states in the outer and inner spaces of the shell and satisfy the boundary conditions on both surfaces of the vibrating shell. A characteristic equation is obtained (by a simultaneous solution of equations (a) to (e)) from which the natural frequency w and the divergence speed U (by putting w = 0) of the shell can be determined. The effects of Mach and Alfvén numbers, of the rate of elastic wave propagation V, and of magnetic field intensity on U are mentioned. The condition of attaining the flutter speed M_f, as well as instability regions of the shell are discussed, and an expression for M_f in the case when V < U is derived. Orig. art. has: 3 figures and 43 formulas. [WA-52]

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Card 2/2

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NOVOKHATKO, E.I.; BAGDASAR'YAN, I.M.

System of program control for the 6L12P and 6L82G milling machines.
Stan.i instr. 34 no.4:11-14 Ap '63. (MIRA 16:3)
(Milling machines--Numerical control)

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BAGDASARYAN, K.A.

Universal milling cutter. Neftianik 6 no.8:20-21 Ag '61.
(MIRA 14:10)

1. Nachal'nik laboratorii Tsekha nauchno-issledovatel'skikh proizvodstvennykh rabot nefteprom yslovogo upravleniya Karadagneft'.
(Oil wells—Equipment and supplies)

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"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103010010-5

BAGDASARYAN, K.A.; ABDULLAYEV, Z.S., starshiy inzh.

Introduce diamond bits in deep well drilling. Neftianik 6 no.12:7-8 D '61. (MIRA 14:12)

1. Nachal'nik laboratorii tsekha nauchno-issledovatel'skikh proizvodstvennykh rabot neftepromyslovogo upravleniya Karadagneft' (for Bagdasaryan). 2. Laboratoriya tsekha nauchno-issledovatel'skikh proizvodstvennykh rabot neftepromyslovogo upravleniya Karadagneft' (for Abdullayev).
(Azerbaijan--Oil well drilling and supplies)

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BAGDASARYAN, K.G.

Some new and little-known lamellibranchiate mollusks from Chokrak deposits of Georgia. Trudy Inst. paleobiol. AN Gruz. SSR no.6:57-65 '61. (MIRA 15:3)
(Georgia--Lamellibranchiata, Fossil)

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"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103010010-5

BAGDASARYAN, K.G.; ZHGENTI, Ye.M.

Transition beds between the Chokrak and Karagan horizons. Izv. Geol.ob-va Gruz. 2 no.1:15-24 '62. (MIRA 17:3)

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"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103010010-5

BAGDASARYAN, K.G.

Origin and development of the Chokrak fauna. Trudy Inst. paleobiol. AN Gruz. SSR 7:111-135 '62. (MIRA 17:7)

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BAGDASARYAN, K.G.

Role of migrations in the genesis and development of the Chokrak fauna. Trudy Inst. paleobiol. AN Gruz. SSR 8: 97-102 '63. (MIRA 17:7)

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"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103010010-5

BAGDASARYAN, Klara Grigor'yevna, mlad. nauchn. sotr., kand. geol.-miner. nauk; DAVITASHVILI, L.Sh., red.

[Development of Chokrak mollusks in Georgia] Razvitie molliuskovoi fauny chokraka Gruzii. Tbilisi, Metsniereba, 1965. 230 p. (MIRA 18:7)

1. Institut paleobiologii AN Gruz.SSR (for Bagdasaryan).

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BAGDASARYAN, KH. S.

The relation between adsorption of dyes on silver bromide and their sensitizing power. A. I. Rabinovich and Kh. S. Bagdassaryan. *Trans. Xero-Photo Research Inst.* (Moscow) 3, 5-13(1935).—Of a group of dyes tested for adsorption on AgBr, all the sensitizers, pyronine G, rhodamine B, eosin, phloxin and erythrosin were adsorbed more or less strongly, while acid rhodamine and Bordeaux B, which do not sensitize, were not adsorbed. When the adsorption is plotted against the concn., the curves at first show little or no increase with the concn. with the strong sensitizers, but after a certain concn. is reached, the adsorption coeff. increases rapidly.

C. E. K. Mees

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BAGDASARYAN, KH S

CA

2

7 **Heterogeneous reactions with atomic hydrogen. Reduction of oxides, sulfides and halogen compounds.** Kh. S. Bagdasar'yan and V. K. Semenchenko. *J. Phys. Chem.* (U. S. S. R.) 6, 1033-8(1935).—From studies of the reducing action of at. H on compds. of 22 common metals in the solid phase given as (+) or (−), it is concluded that the reducibility or nonreducibility is detd. by the heat necessary for dissocn. to the elements of the compd. and the ratio of ionic radius to charge, all results obtained being in accord with predictions from these considerations.

F. H. Rathmann

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BAGDASARYAN, KH. S.

2

Atomic hydrogen. Kh. S. Bagdasar'yan (Uspekhi Khim. 5, 39-65(1936)). A review covering the measurement of H-atom concn., physicochem. consts. of at. H, vol., triple collision, heterogeneous and wall recombination and chem. reactions at low and high temps. with atoms and simple and complex mols. F. H. Rathmann

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GAGDASARYAN, KH. S.

BC

A-1

PROCESSES AND PROPERTIES INDEX

Heterogeneous reactions with atomic hydrogen. II. Formation of hydrogen sulphide. III. Formation of hydrides of selenium, tellurium, and antimony. C. S. Bagdasarjan (J. Phys. Chem. Russ., 1937, 10, 389—400, 401—411).—II. The rate of reaction of at. H with solid S ∝ [H] in the extended phase. 20% of the H atoms striking the surface of the S react with it.

III. The rate of reaction of at. H with solid Se, Te, and Sb ∝ [H] in the extended phase. 10% of the H atoms striking the surface of Se and Te react, the corresponding figure for Sb being 11%. On the surface of Sb the probability of recombination of H atoms is < 10 times as great as that of their forming SbH_3, a reaction without appreciable energy of activation. The mechanism of the above reactions is undecided. R. C.

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BAGDASARYAN, KA.S.

BC

A-1

Optical sensitization of silver halides. VI. Quantum yield in the photo-decomposition of sensitised silver bromide in connexion with the theory of sensitization. C. S. BAGDASARJAN (Acta Physicochim. U.R.S.S., 1933, 9, 205—207).—Photo-decomp. of a highly disperse suspension of AgBr in H_2O, containing a slight excess of Br', by blue light (4360 A.) proceeds with a quantum yield γ of 1 in presence of Br-$NaNO_2$ as acceptor. If the AgBr contains adsorbed erythrosin (I), photodecomp. by yellow light (5790 A.) in the absence of $NaNO_2$ is accompanied by decolorisation of (I), and γ = 0·05—0·07; in presence of $NaNO_2$, γ = 0·1, and no destruction of (I) occurs. Increase in [(I)] does not affect γ. The destruction of (I) in absence of $NaNO_2$ is due probably to oxidation by liberated Br_2. Pyronine *G* gives γ ~0·06. Each mol. of (I) liberates an average of 4—5 atoms of Ag in presence of $NaNO_2$. The low val. of γ in the sensitisation of AgBr by (I) indicates the existence of side processes, tending to deactivate the mol. excited by (I). The possible mechanisms of sensitisation are discussed. W. R. A.

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BAGDASAR'YAN, KH. S.

5

Optical sensitization of photographic films. Kh. S. Bagdasar'yan. *Uspekhi Khim.* 8, No. 11, 1617-51(1939); *Khim. Referat. Zhur.* 1940, No. 7, 112; cf. C. A. 33, 5759[1].—A review of the latest phys.-chem. investigations in the domain of optical sensitization of Ag halides. On the basis of contemporary quantum-mech. views it discusses problems of the formation of photographic images, photochem. decompn. of Ag halides, phys.-chem. state of the system sensitizer-Ag halide and the latest photochem. studies of this system. The theory of the mechanism of optical sensitization, especially the theory of "2nd order collisions" and the theory of Gurney and Mott of the ionic reduction of Ag by the dye, are discussed critically.

New exptl. data of optical sensitization obtained by B. are given. Investigations of the role of Br in the processes of sensitized photolysis indicate that under illumination with blue light in the presence of an acceptor, such as $NaNO_2$, the reaction proceeds with a const. velocity and with a quantum no. equal to 1. Replacing $NaNO_2$ with $NaNO_3$ produces a quantum yield of less than 1 and a discoloration of the dye. Investigations of the kinetics of photochem. decompn. of sensitized AgBr indicate that in a neutral medium there is observed an induction period which is absent in strongly alk. media. The quantum yield of sensitized photolysis increases with decrease in the wave length.

W. R. Henn

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BAGDASARYAN, Kh. S.

"Bond Energies and Departure From the Additivity Rule in Hydrocarbons," Zhur. Fiz. Khim., No.14, pp 1326-38, 1940

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BAGDASARYAN, KH. S.

2

PROCESSES AND PROPERTIES INDEX

The problem of the absolute velocity of heterogeneous reactions. Kh. S. Bagdasar'yan. *J. Phys. Chem.* (U. S. S. R.) 19, 40-9(1941).—Math.-theoretical. For heterogeneous reactions of 0, 1st and 2nd order on smooth surfaces it is shown that the Temkin equation (cf. *C. A.* 29, 5726[1]) for the transition state is a general equation, whereas the Polanyi-Wigner expression for abs. velocity (cf. *C. A.* 20, 2449) is an approximation for certain special cases. The frequency of the pre-exponential multiplier in the Arrhenius equation for first-order heterogeneous reactions is detd. by the value of $kT/h\nu$ for the active complex. Examples of slow and rapid second-order reactions are given. Comparison of the equil. and the rate of reaction consts. for various equil. reactions shows that the heterogeneous recombinations proceed at normal rates.

F. H. Rathmann

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BAGDASARYAN, KH. S.

Kinetics and mechanism of photographic development
I. Kinetics of the development of individual grains

Kh. S. Bagdasar'yan. *J. Phys. Chem.* (U. S. S. R.) 17, 336-48(1943).—The kinetics of the phys. and chem. development of individual grains can be interpreted on the basis of modern electrochem. conceptions by assuming that the slowest stage of the process is the transfer of an electron from the mol. of the developer to the Ag particle of the latent image or partly developed grain. The velocity of this process depends on the value of the potential jump on the Ag-soln. boundary. The theory of supersatn., the diffusion theory of Frank-Kamenetskii (*C. A.* 34, 5788[9]) and the theory of Anastasevich (*C. A.* 37, 3001[6]) are not in conformity with the kinetics of development of the individual grains. F. H. Rathmann

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BAGDASARYAN, KH. S.

PROCESSES AND PROPERTIES INDEX

2

Physico-Chemical Institute from 1934 to 1943. Kh. S. Bagdasar'yan. *J. Phys. Chem.* (U. S. S. R.) 17, 424-45 (1943).—About 880 papers published in the U. S. S. R. and abroad are listed. F. H. Rathmann

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1ST AND 2ND ORDERS — 3RD AND 4TH ORDERS

BAGDASARYAN, Kh. S. — PROCESSES AND PROPERTIES INDEX

2

Photopolymerization of vinyl acetate. Kh. S. Bagdasar'yan. *Acta Physicochim. U.R.S.S.* 19, 220-85 (1944) (in English).—The kinetics of the photopolymerization of vinyl acetate (I) in EtOAc and in benzene soln. was studied by the dilatometric and viscometric methods. Radiation in the region 303-313 mμ was obtained from an appropriately filtered Hg-vapor lamp and its intensity was detd. with a uranyl oxalate actinometer. The rate of polymerization of I, pure or in EtOAc soln., is proportional to the square root of the intensity of the incident light at 50°. For a 75% soln. in benzene a similar relation exists, but for a 50% soln. the polymerization rate is proportional to the intensity of the incident light. The rate of reaction in benzene soln. is lower by a factor of approx. 6 than that in EtOAc soln. and the chain length of the polymer, as measured by values of specific η/(concn. of monomer), is lower by a factor of 2 to 3. In either solvent the chain length is proportional to the monomer concn. (c) and independent of the light intensity. From the temp. coeff. of the polymerization rate, detd. at temps. at which thermal polymerization is negligible, an energy of activation of 6.3 kg.-cal. is calcd. For various concns. of I in EtOAc at 50° the reaction rates are of the order of (3-60) × 10^{-7} mole/sec., the quantum yields are 600-1200 and values of specific η/c are 1-12. Values of specific η/c increase with diminishing temp. to an extent corresponding to an activation energy of approx. 2 kg.-cal. Resorcinol and hydroquinone decreased the rate of polymerization to an extent detd. by the light intensity as well as by the concn. of inhibitor; values of specific η/c also decreased with increasing inhibitor concn. These results are in agreement with the requirements of a postulated mechanism of polymerization. The similarities between photopolymerization and polymerization initiated by benzoyl peroxide are pointed out and an attempt is made to explain the discrepancies between the work of Cuthbertson, et al. (*C.A.* 33, 4960[8]) and Kamenskaya and Medvedev (*C.A.* 35, 2400[8]).

T. H. Dunkelberger

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BAGDASARYAN, KH.S.

PROCESSES AND PROPERTIES INDEX

Influence of bromide ions upon photographic processes. Kh. S. Bagdasar'yan. *Acta Physicochim. U.R.S.S.* 19, 436-47(1944)(in English).—Certain primary and secondary electronic processes involved in the photolysis of AgBr, optical sensitization and desensitization, and the Herschel effect are interpreted in terms of the transition of electrons from the AgBr crystal conduction band to the adsorption layer (or soln.) or [illegible]. The charge resulting from adsorption of bromide ions at the AgBr surface facilitates the departure of electrons from the AgBr crystal and inhibits the reverse process. In the photolysis, the quantum yield depends on the rate at which the Br atoms leave the lattice. Excess bromide ions inhibit the reaction of Br with halogen acceptors; this retards photolysis. The effect of bromide ion on optical sensitization and desensitization and the Herschel effect is interpreted in terms of its effect upon the electron transitions. T. H. James

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BAGDASARYAN, KH. S.

5

Kinetics and mechanism of photographic development. II. Kinetics of development of the photographic layer. (A new equation for the kinetics of nucleus formation in topochemical reactions.) Kh. S. Bagdasar'yan (Karpov Inst. Phys. Chem.). *Acta Physicochim. U.R.S.S.* 20, 441-58(1945); cf. *C.A.* 39, 2450[9]. The rate of development is controlled by the rate of formation of development nuclei and by the rate of nuclear growth. Development nuclei are formed during the induction period at the spots where latent-image particles are located. The same process of electrochem. reduction of AgBr occurs in nuclear formation as in nuclear growth, the former requiring only addtl. activation energy. It assumes that a latent image particle must increase by p Ag atoms to become a development nucleus, and the time necessary will vary for different nuclei owing to fluctuations. Using simplifying assumptions, he derives an equation for nuclear formation which gives an S-shaped curve. The kinetics of development are considered for 2 cases: (1) the av. time for nucleus formation is considerably greater than that for propagation of reaction through the whole grain, (2) the times are about equal. S-shaped curves representing the no. of developed grains as a function of time can be obtained in each case. The dependence of curve shape on the charge of the active developing agent is accounted for by the assumption that the higher the charge the greater the value of p. The applicability of the nucleus formation equation to other topochem. reactions is considered.

T. H. James

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BAGDASARYAN, KH. S.
P.A

Densitizing + Densitometry.

 771.534.53 : 771.535

Physicochemical Interpretation of the Characteristic Curve of the Photolayer. KH. S. BAGDASARYAN. *J. Tech. Phys. (U.S.S.R.)*, 16, 703-12, 1946.—It is assumed (*a*) that the probability of a photoelectron being neutralized by a silver ion depends on the depth of the potential depression in which the electron is located, (*b*) that the frequency of a potential depression having the energy $\Sigma_0(1-x)$ is proportional to x, (*c*) that a latent image nucleus must have q or more atoms of silver. The equation $N/N_0 = 1 - \exp. [-A(\log E - \log B)^q]$ is derived for the ratio of the developed grains N to the total number of grains N_0. A is a constant inversely proportional to Σ_0^2, Σ_0^1 being the deepest potential depression in the layer. B is a constant inversely proportional to Σ_0^3 and proportional to q. E is the average number of light quanta absorbed by a grain. The equation agrees with experiment. From the experimental data, q is calculated to be 9 to 29; probably this value is too high because only silver nuclei at the grain surface are effective. The tangents to the curves "N/N_0 against log E" in their inflection points cross in one point, if several curves referring to one emulsion but different times of development are compared. If all the nuclei are equally effective, this point of crossing lies below the abscissa; and if one nucleus in a grain is more effective than the others, this point lies above the abscissa. These conclusions agree with the results of NIETZ ("*Theory of Development*," *Monograph from the Eastman Kodak Co., Rochester, N.Y.*, 1922).

Chem. Abs.

1947

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BAGDASARYAN, KH. S.

2

Kinetics of polymerization in the presence of an inhibitor. Kh. S. Bagdasar'yan (Karpov Inst. of Phys. Chem., Moscow). *J. Phys. Chem.* (U.S.S.R.) 20, 1415-20(1946)(in Russian).—The rate of polymerization is calcd. as a function of the original concn. of the inhibitor and of the ratio n/n_0, n being the variable concn. of the active polymers and n_0 this concn. in the absence of any inhibitor.

J. J. Bikerman

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BAGDASAR'YAN, KH. PA 54T28

USSR/Chemistry - Photography Nov/Dec 1946
Chemistry - Emulsions

"Physico-Chemical Interpretation of the Characteristic Curve of the Photolayer," Kh. Bagdasar'yan, Karpov Inst Phys Chem, Moscow, 14 pp

"Acta Physicochimica URSS" Vol XXI, No 6

Deduction of a characteristic equation for photolayer (Hurter and Driffield curve). Discusses properties of curve, tangentials at inflexion points, and limiting cases. Received, 10 Oct 1945.

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BAGDASARYAN, KH.S.

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3RD AND 4TH ORDERS

COMMON ELEMENTS

COMMON VARIABLES INDEX

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AUTHOR INDEX

1ST AND 3RD LETTER

2ND LETTER

3RD AND 4TH ORDERS

Photographic Development. (In Russian.) Kh. S. Bagdasar'yan. *Uspekhi Khimii* (Progress in Chemistry), v. 16, Nov.-Dec. 1947, p. 653-663.

Critically reviews present theories concerning photographic development of silver bromide emulsions. Discusses: the latent image; mechanism of selective reduction; the induction period; kinetics of the development of the photosensitive layer; and characteristic curve of the layer. 33 ref.

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BAGDASARYAN, KH. S.

Photopolymerization of vinyl compounds. II. Photopolymerization of methyl methacrylate. Kh. S. Bagdasar'yan (Karpov Inst. Phys. Chem., Moscow). *J. Phys. Chem.* (U.S.S.R.) 21, 25-35(1947)(in Russian); cf. *C.A.* 30, 2447[3]. The rate V of polymerization of methyl methacrylate (I) is $V = kM^{3/2}\sqrt{J}$, M being the original concn. of the monomer, J the light intensity, and k a const. This equation is valid for small degrees of polymerization (less than 8%) for middle I and for its solns. in C_6H_6, AcOEt, CCl_4, and EtOH. When the vol. w of the reaction vessel is varied between 2 and 24 cc., the fraction $V/\sqrt{J_1w}$ remains const., J_1 being the no. of quanta absorbed. This shows that polymerization occurs uniformly in the whole vol., although the vessel is irradiated from one side only. V at 50° is twice that at 25°. The intrinsic viscosity of the polymer, in a range of $M^{3/2}w$, V values, increases linearly with this expression. The fraction $V/\sqrt{J_1w}$ at 303-313 mμ is 3 times that at 253-265 mμ. The *absorption* coeff. of I for these spectral ranges is detd. The quantum yield of the polymerization is, e.g., 40 for M = 0.73 mol./l. in EtOAc and 340 for pure I. The mechanism of the polymerization is discussed. The length of the mol. chains is detd. by the recombination of active radicals. Not all quanta absorbed initiate reaction chains. The efficiency of the primary process increases when M decreases and the wave length increases.

J. J. Bikerman

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BAGDASAR'YAN, Kh. S.

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B

Mechanism and Kinetics of Vinyl Polymerization. (In Russian.) Kh. S. Bagdasar'yan. *Uspekhi Khimii* (Progress in Chemistry), v. 17, May-June 1948, p. 816-836.

A review. 43 ref.

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"APPROVED FOR RELEASE: 06/06/2000 CIA-RDP86-00513R000103010010-5

BAGDASARIAN, KH. S.

Kh. S. Bagdasarian, Photopolymerization of vinyl compounds. III. Photopolymerization of methyl acrylate. Pp. 1181-91.

The photopolymerization of methyl acrylate in an ethyl acetate solution is proportional to the square root of the light intensity. The dependence of the polymerization rate on the concentration of the monomer points to the effect of the concentration deactivation of the primary excited molecules. The yield of primary radicals is twice as large for metacrylate as for acrylate.

The Karpov Physico-Chemical Inst.
Lab. of Polymerization Processes, Moscow
January 28, 1948

SO: Journal of Physical Chemistry (USSR) 22, 10, 1948.

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Bagdasar'yan, Kh. S. "On the connection between the structure of vinyl compounds and their polymerization properties," In the symposium: Investigations in the field of complexmolecular compounds, Moscow-Leningrad, 1949, p. 339-58 Bibliog: 20 items

SO: U-5241, 17 December 1953, (Letopis 'Zhurnal 'nykh Statey, No. 26, 1949)

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36586. O Svyazi Mezhdu Stroeniyem Vinilovykh Soedi. Neniy i Ikh Sposobnost'yu K Polimerizatsii. Zhurnal Fiz. Khimii, 1949, Vyp. 11, c. 1375-84. - Bibliogr: 18 Nazv.

SO: Letopis' Zhurnal'nykh Statey, Vol. 50, Moskva, 1949

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BAGDASARYAN, KH. S.

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Calculations for Molecules With Conjugated Bonds by the Method of Electron Pairs. (In Russian.) Kh. S. Bagdasar'yan. *Zhurnal Fizicheskoi Khimii* (Journal of Physical Chemistry), v. 23, July 1949, p. 761-774.

Calculations lead to satisfactory agreement with experiment for interatomic distances, energy of conjugated bonds, and exciting and triplet levels. Data are tabulated for benzene, butadiene, ethylene, naphthalene, styrene, hexatriene, and octatetraene. 16 ref.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

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CA BAGDASARYAN, KH. S.

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Relation between the structure of vinyl compounds and their polymerization capacity. Kh. S. Bagdasar'yan (Karpov Inst. Phys. Chem., Moscow). Zhur. Fiz. Khim. 23, 1375-84(1949).—Polymerization is thermodynamically possible only if the heat Q of polymerization is greater than 8000 cal./mol. (of monomer). The exptl. Q is 11,000-22,000; it is smaller, the greater the conjugation energy lost in the polymerization and the greater the steric hindrance. The effect of structure on the rate of chain growth and the rate of acquisition and loss of a H or halogen atom is discussed. The energy of activation is calcd. for polymerizations that do and do not involve conjugated bonds. J. J. Bikerman

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