SAFARYAN,M.K., kandidat tekhnicheskikh nauk

Investigation and possible improvement of the operating conditions of vertical, welded, cylindrical tanks. Trudy Akad. neft. prom. no.2:251-265 '55. (MLRA 8:5)

(Petroleum--Storage)

SAFARYAN, M. K.

AID P - 2104

Subject : USSR/Engineering

Card 1/2 Pub. 78 - 17/24

Authors : Safaryan, M. K. and Chichko, G. M.

Title : More precise method of calculating drop-shaped reservoirs

Periodical: Neft. khoz., v.33, no.4, 78-83, Ap 1955

Abstract : The advantages of drop-shaped reservoirs over the standard vertical cylindrical types are outlined. Experiments have shown that in long-term storing of light oil products evaporation losses are greatly reduced since most volatitle light fractions are under constant pressure in the upper part of the drop-shaped reservoir. When a drop-shaped shell is almost completely filled with liquid and the small space above it is filled with gas under pressure the hydrostatic pressure exercises equal tension stresses in all parts of the shell envelope and therefore the shell thickness can be made uniform in

AID P - 2104

Neft. khoz., v.33, no.4, 78-83, Ap 1955

Card 2/2 Pub. 78 - 17/24

all its parts. The only part which requires some reinforcement is the equatorial belt. Construction details are shown. Charts, diagrams.

Institution: None

Submitted : No date

PETERMANN, A.; VINETSKAYA, A.Yu.[translator]; BOLOTIN, B.M. [translator]; SAFARYAN, M.K., kandidat tekhnicheskikh nauk, redaktor; YERSHOV, P.R., vedushchiy redaktor; TROFIMOV, A.V., tekhnicheskiy redaktor

[Reinforced concrete tanks for the storage of petroleum and petroleum products. Translated from the German] Zhelezobetonnye rezervuary dlia khraneniia nefti i nefteproduktov. Perevod s nemetskogo A.IU. Vinetskoi i B.M.Bolotina. Pod red. M.K.Safariana. Moskva, Gos. nauchno-tekhn. izd-vo neftianoi i gorno-toplivnoi lit-ry, 1956. 130 p.
(Petroleum--Storage) (MLRA 10:1)

SAFARYAN, M.K., kandidat tekhnicheskikh nauk.

Permissible deviations from planned dimensions of vertical cylindrical storage tanks. Stroi.pred.neft.prom 1 no.9:16-18 N '56.
(Tanks) (Petroleum--Storage) (MLRA 10:1)

SAFARYAN, M.K.

IDASHKIN, S.I., kandidat tekhnicheskikh nauk, (g. Moskva); SAFARYAN, M.K., kandidat tekhnicheskikh nauk, (g. Moskva); TUPIKOV, A.N., inzhener, (g. Moskva).

Concrete building elements reinforced with prestressed concrete rods. Strei. pred. neft. prom. 2 no.3:18-20 Mr '57. (MIRA 10:4)
(Reinforced concrete construction)

SAFARYAN, M.K., kandidat tekhnicheskikh nauk (g. Moskva).

Analysis of roof failures on industrial buildings. Stroi.pred.neft. prom. 2 no.6:13-16 Je '57. (MLRA 10:7)
(Roofs)

Safaryan, M.K.

TDASHKIN, S.I., kand.tekhn.nauk; KAMERSHTEYN, A.G., kand.tekhn.nauk; SAFARYAN, M.K., kand.tekhn.nauk.

Composite reinforced concrete structural components. Stroi.prom. 35 no.6:16-18 Je '57. (MIRA 10:10)
(Reinforced concrete)

IDASHKIN, S.I., kand.tekhn.nauk; SAFARYAN, M.K., kand.tekhn.nauk; KARAMYSHEV, I.A., inzh., nauchnyy red.; GORYACHEVA, T.V., red.izd-va; PRUSAKOVA, T.A., tekhn.red.

[Reinforced concrete reservoirs and tanks for water and petroleum products; design and construction practices abroad] Zhelezo-betonnye rezervuary dlia vody i nefteproduktov; zarubezhnyi opyt proektirovaniia i stroitel'stva. Moskva, Gos.izd-vo lit-ry po stroit., arkhit. i stroit.materialam, 1958. 178 p. (MIRA 12:3)
(Precast concrete construction) (Tanks) (Reservoirs)

SAFARYAN, M.K., kand.tekhn.nauk; IVANTSOV, O.M., nauchnyy red.; KAPKANETS, V.I., red.; LEBEDEVA, D.V., tekhn.red.

[Steel tanks for petroleum products] Stal'nye rezervuary dlia khraneniia nefteproduktov; issledovaniia raboty konstruktsii. Moskva, Otdel nauchno-tekhn.informatsii, 1958. 239 p.
(Tanks) (MIRA 13:9)

PHASE I BOOK EXPLOITATION SOV/4792

Safaryan, Misak Karapetovich, Candidate of Technical Sciences

Stal'nyye rezervuary dlya khraneniya nefteproduktov; issledovaniya raboty konstruktsiy (Steel Tanks for Storing Petroleum Products; Construction-Work Findings) Moscow, Otdel nauchno-tekhn. informatsii, 1958. 239 p. Errata slip inserted. 1,000 copies printed.

Sponsoring Agencies: Glavnoye upravleniye gazovoy promyshlennosti pri Sovete Ministrov SSSR; Vsesoyuznyy nauchno-issledovatel'skiy institut po stroitel'stvu magistral'nykh truboprovodov "VNIIST."

Scientific Ed.: O.M. Ivantsov; Ed.: V.I. Kapkanets; Tech. Ed.: D.V. Lebedeva.

PURPOSE: This book is intended for industrial engineering and scientific workers of the oil and gas industry and of other industries concerned with the planning, analysis, construction, and operation of steel tanks for petroleum products.

COVERAGE: The author summarizes results of theoretical and experimental studies of steel tanks of various designs and types for storing petroleum products. Also presented are the results of a detailed study of the geometric form of

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high-capacity tanks, used in establishing standards for permissible deviations from design specifications. The studies were carried out by the "VNIIST" (All-Union Scientific Research Institute for Construction in the Petroleum and Gas Industry) with the direct participation of the author. The author describes new tanks designed by engineers M.I. Ashkinazi, G.M. Chichko, A.S. Arzunyan, and by Ye. N.Lessing and V.M. Didkovskiy. He thanks the latter four and his co-workers at the "VNIIST": M.I. Avdeyeva, P.A. Agureyev, and A.G. Kamershteyn. There are 46 references: 40 Soviet, 4 German, and 2 English.

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Introduction 3

Ch. I. Specificity of Storing Petroleum Products and the Development of Tank Construction

Specific properties of petroleum products and special features of their storage 6
Field of application of steel tanks for storing petroleum products 12
Tank construction in the petroleum industry of the USSR 15
Brief description of the state of tank construction in other countries 16

SAFARYAN, M.K., kand.tekhn.nauk; ISHCHENKO, Yu.K., inzh.

Tests for the temperature effect on rectangular, reinforced concrete tanks buried below ground level. Stroi.truboprov. 3 no.11:23-28 N '58. (MIRA 11:12)
(Tanks--Testing) (Thermal stresses)

SAFARYAN, Misak Karapetovich; ASHKINAZI, Mikhail Isayevich; CHOLOYAN, Genrik Saakovich; RAZUMOVSKAYA, T.Ya., red.; DEMIDOV, Ya.F., tekhn. red.

[Steel tanks with spherical cylindrical roofs for petroleum products; experimental and theoretical studies of the construction]Stal'nye rezervuary so sferotsilindricheskoi krovlei dlia nefteproduktov; eksperimental'nye i teoreticheskie issledovaniia konstruktsii. Moskva, VNIIST Glavgaza SSSR. Redaktsionno-izdatel'skii ot-del, 1961. 94 p. (MIRA 15:11)
(Tanks)

SAFARYAN, Misak Kapatetovich, kand. tekhn. nauk; ISHCHENKO, Yuriy Konstantinovich, inzh.; MESROPYAN, Nikolay Mushegovich, inzh.; RAZUMOVSKAYA, T.Ya., red.; DEMIDOV, Ya.F., tekhn. red.

[Srudy of the behavior of rectangular reinforced concrete tanks under the effect of temperature change; general conclusions from experience in design, construction, and operation]Issledovanie raboty priamougol'nykh zhelezobetonnykh rezervuarov pri temperaturnykh vozdeistviiakh; obobshchenie opyta proektirovaniia, stroitel'stva i ekspluatatsii. Moskva, VNIIST Glavgaza SSSR, redaktsionno-izdatel'skii otdel, 1961. 166 p.
(MIRA 15:9)

(Tanks) (Concrete construction)

SAFARYAN, Misak Karapetovich, kand. tekhn.nauk; IVANTSOV, Oleg Maksimovich, inzh.; RABINOVICH, Ye.Z., red.; SOLCHANIK, G.Ya., red.; FEDOTOVA, I.G., tekhn.red.

[Design and construction of steel tanks for petroleum products] Proektirovanie i sooruzhenie stal'nykh rezervuarov dlia nefteproduktov. Moskva, Gos.nauchno-tekhn. izd-vo neft. i gorno-toplivnoi lit-ry, 1961. 325 p. (MIRA 14:5)
(Petroleum products--Storage)

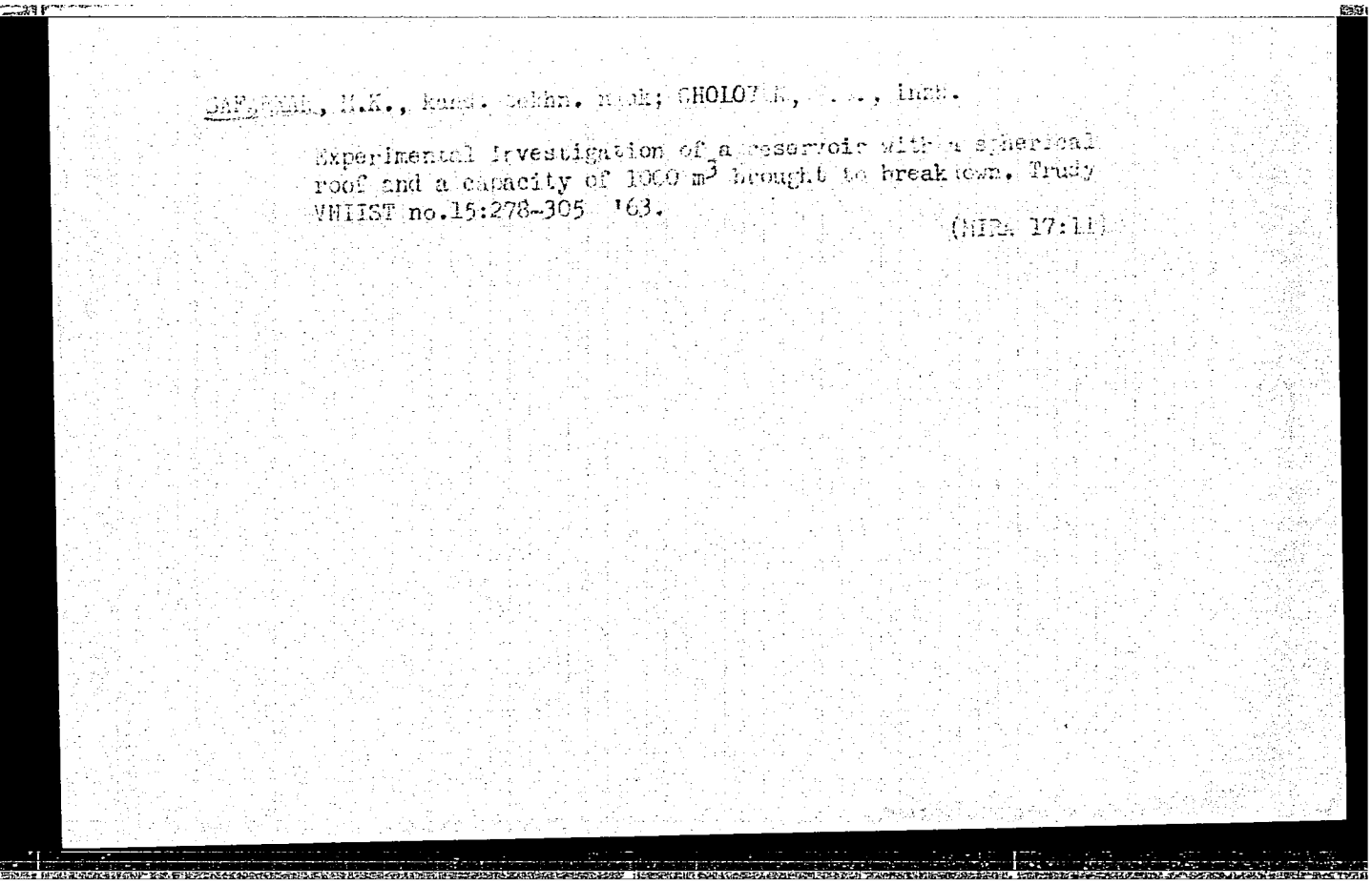
SAFARYAN, M.K., kand.tekhn.nauk; VEREVKIN, S.I., inzh.; CHOLOYAN, G.S., inzh.

Restoring the deformed shell of a drop-shaped tank. Stroi. trubo-prov. 6 no.9:17-18 S '61. (MIRA 14:9)
(Gasoline--Storage) (Tanks--Maintenance and repair)

SAFARYAN, M.K., kand.tekhn.nauk; KOTSIK, Ya.B., inzh.; CHOLOYAN, G.S., inzh.

Experimental study of a welded cylindrical tank with a capacity of 10,000 m^3. Stroi. truboprov. 7 no.7:11-12 Jl '62. (MIRA 15:7)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut po stroitel'stvu magistral'nykh truboprovodov, Moskva.
(Tanks)
(Petroleum--Storage)



SAF[illegible], M.K., kand. tekhn. nauk; GHOLOV K., [illegible], inzh.

Experimental investigation of a reservoir with a spherical roof and a capacity of 1000 m^3 brought to breakdown. Trudy VNIIST no.15:278-305 '63. (MIRA 17:11)

SAFARYAN, M.K., kand. tekhn. nauk; GHOLOYAN, G.S., inzh.; KOTSIK, Ya.B., inzh.

Experimental investigation of horizontal reservoirs with cylindrical bottoms. Trudy VNIIST no.15:309-319 '63. (MIRA 17:11)

S/0207/64/000/004/0029/0034

ACCESSION NR: AP4044717

AUTHORS: Safaryan, M. N. (Moscow); Stupochenko, Ye. V. (Moscow)

TITLE: Rotational relaxation of diatomic molecules in a light inert gas

SOURCE: Zhurnal prikladnoy mekhaniki i tekhnicheskoy fiziki, no. 4, 1964, 29-34

TOPIC TAGS: vibrational relaxation, inert gas, diatomic molecule, harmonic oscillator, rotational relaxation, Fokker Planck equation

ABSTRACT: The rotational relaxation of heavy diatomic molecules (a rigid rotator) was analyzed in a light inert gas under conditions of strongly nonadiabatic collisions between atoms and molecules. The initial energy distribution of the molecule corresponds to $T_0 < T$, (T- temperature of the inert gas). The Boltzmann kinetic equation is written for the distribution function $f(E, \mathcal{E}, t)$, (where $E, \mathcal{E}$ are the translation and rotational energies respectively), using the principle of detailed balancing and expanding the right hand side in powers of Δ and Δ_1. The Fokker-Planck equation of diffusion is obtained in the $(E, \mathcal{E})$ space, or $\partial f / \partial t = -\operatorname{div} \mathbf{j}$, where

$$\left.\begin{aligned} j_E &= -B_E\left(\frac{\partial f}{\partial E} - f\frac{\partial \ln f^0}{\partial E}\right) - B_{E\mathcal{E}}\left(\frac{\partial f}{\partial \mathcal{E}} - f\frac{\partial \ln f^0}{\partial \mathcal{E}}\right) \\ j_{\mathcal{E}} &= -B_{\mathcal{E}}\left(\frac{\partial f}{\partial \mathcal{E}} - f\frac{\partial \ln f^0}{\partial \mathcal{E}}\right) - B_{\mathcal{E}E}\left(\frac{\partial f}{\partial E} - f\frac{\partial \ln f^0}{\partial E}\right) \end{aligned}\right\}, \quad \text{and} \quad B_E = \frac{\langle \Delta_1^2 \rangle}{2\tau} = \frac{1}{2}\iint \Delta_1^2 w(E, \mathcal{E}, \Delta_1, \Delta)\, d\Delta_1 d\Delta$$

$$B_{\mathcal{E}} = \frac{\langle \Delta^2 \rangle}{2\tau}, \quad B_{\mathcal{E}E} = \frac{\langle \Delta_1 \Delta \rangle}{2\tau}.$$

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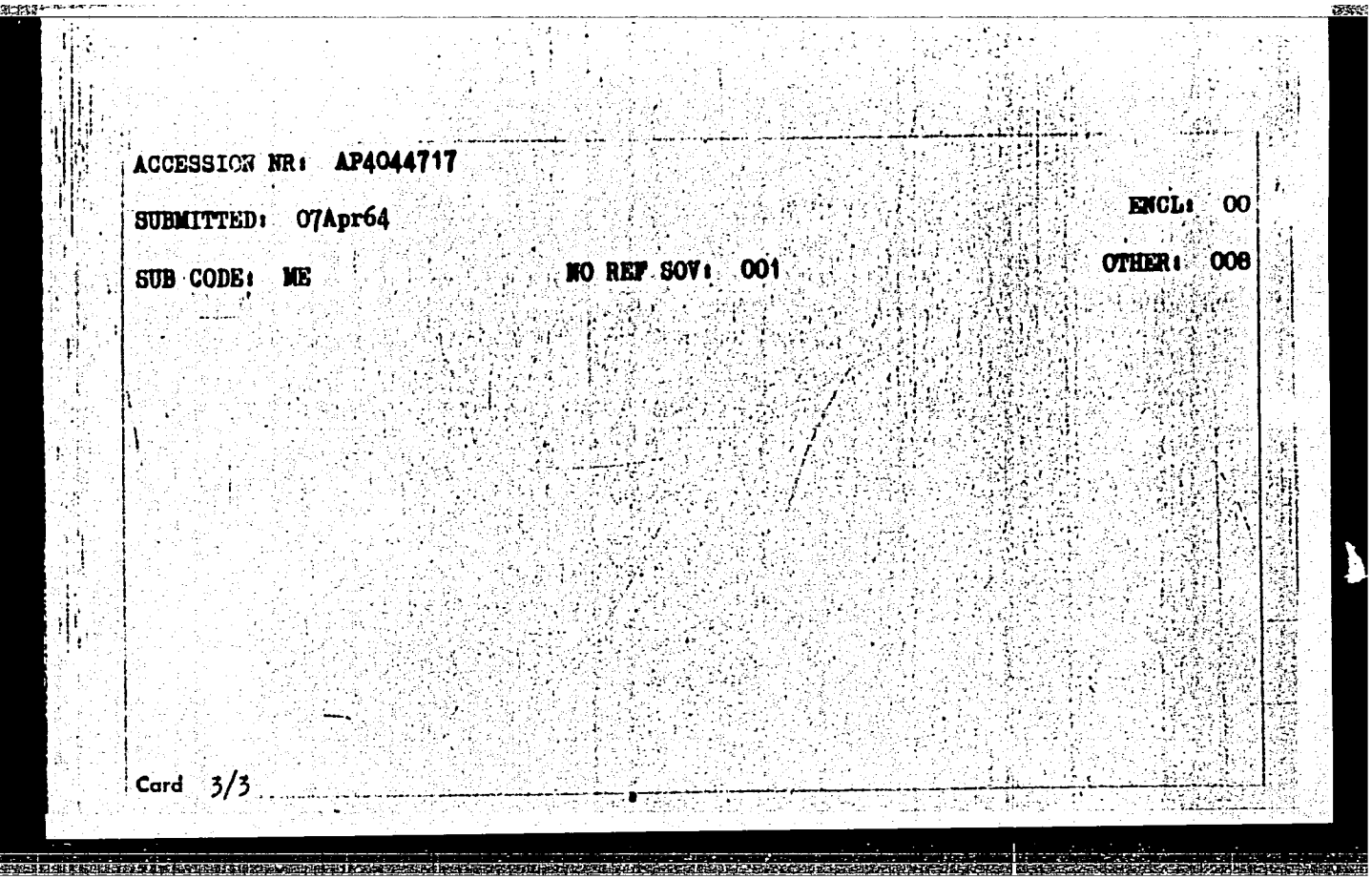
ACCESSION NR: AP4044717

The coefficients of the above equation are then determined from the collision dynamics of I_2, Br_2, and Cl_2 molecules with He atoms. The change in momentum for atoms is given by $\Delta p = 2mb \sin \frac{1}{2}\chi$, and change in molecular energy by $\Delta_1 \equiv \Delta E = \frac{P \Delta p \cos\beta}{2M}$ $\left(E = \frac{P^2}{4M}\right)$. Coefficient B_E then yields $B_E = bE$, $b = \frac{32}{3}\frac{m}{M} nkT\, \Omega_{12}^{(1,1)}$, where Ω_{12} is the total scattering cross section. Introducing rotational energy distribution function Φ $\left[\Phi(\varepsilon, t) = \int_0^\infty f(E, \varepsilon, t)\, dE\right]$, the Fokker-Planck equation is obtained in the form $\frac{\partial \Phi}{\partial t} = \frac{\partial}{\partial \varepsilon}\left\{b\varepsilon\left(\frac{\partial \Phi}{\partial \varepsilon} + \frac{1}{kT}\Phi\right)\right\}$ which is identical to harmonic oscillator relaxation equation in a thermostat $h\nu/kT \ll 1$. Similarily, the equation for translational degree of freedom yields $\frac{\partial F}{\partial t} = \frac{\partial}{\partial E}\left\{bE\left(\frac{\partial F}{\partial E} + \left(\frac{1}{kT} - \frac{1}{2E}\right)F\right)\right\}$. The solutions of both of the above equations are then given in terms of generalized Laguerre polynomials. Orig. art. has: 38 equations.

ASSOCIATION: none

Card 2/3



ACCESSION NR: AP4044717

SUBMITTED: 07Apr64 ENCL: 00

SUB CODE: ME NO REF SOV: 001 OTHER: 008

Card 3/3

L 46167-65 EWT(1) IJP(c)
ACCESSION NR: AP5009548 S/0207/65/000/001/0093/0095

AUTHOR: Safaryan, M. N. (Moscow); Stupochenko, Ye. V. (Moscow)

TITLE: Contribution to the theory of vibrational relaxation of diatomic molecules

SOURCE: Prikladnoy mekhaniki i tekhnicheskoy fiziki, no. 1, 1965, 93-95

TOPIC TAGS: diatomic molecule, vibrational relaxation, relaxation time, gas kinetic equation, molecular collision

ABSTRACT: The relaxation of diatomic molecules (harmonic oscillators) is considered within the framework of classical mechanics in a relatively light inert gas which serves as a thermostat. The gas-kinetic equation for the distribution function of the diatomic molecule is approximated by a Fokker-Planck equation in the space of the energies of translational, rotational, and vibrational motions under the assumption that the collisions are strongly non-adiabatic. In this approximation the different degrees of freedom relax independently of one another, although the characteristic terms of these relaxations are found to be of the same order of magnitude. The vibrational relaxation time is expressed in terms of the gas-kinetic integral. It is assumed that the molecules and atoms interact clas-

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L 46167-65
ACCESSION NR: AP5009548 0

sically, that the molecule vibrations are harmonic and do not change the moment of inertia of the molecule, and that a colliding atom interacts only with the nearest atom of the molecule. The vibrational relaxation time is determined in accordance with a procedure previously used by the authors for rotational relaxation of diatomic molecules in a light inert gas (PMTF, 1964, No. 4). Orig. art. has: 15 formulas.

ASSOCIATION: None

SUBMITTED: 24Sep64 ENCL: 00 SUB CODE: NP, ME

NR REF SOV: 003 OTHER: 001

Card 2/2

SARKISOV, [illegible] STUPOCHENKO, Ye.V. (Moskva)

[illegible] vibrational relaxation of diatomic molecules. FMIF no.1:93-[illegible] 1965. (MIRA 18:8)

SAFARYAN, S.

Expand the assortment, improve the quality of recreation and household goods. Prom.Arm. 4 no.6:7-10 Je '61. (MIRA 14:8)

1. Zamestitel' Ministra torgovli Armyanskoy SSR.
(Armenia--Manufactures)

SAFARYAN, S.

Improve the quality of consumers' goods. Prom.Arm. 7 no.1:18-21 Ja '64. (MIRA 17:4)

1. Zamestitel' ministra torgovli Armyanskoy SSR.

SAFARYAN, S.N. (Leningrad)

First Leningrad Conference on the Problems of Human Engineering. Vop. psikhol. 11 no.1:186-189 Ja-F '65. (MIRA 18:4)

SAFARYANTS, A.R.

"Handbook for the making of dies for die stamping" by V.M. Anikin, IU.S. Lukashin. Kuz. shtam. proizv. 3 no. 5:48,3 of cover My '61. (MIRA 14:5)

(Dies (Metalworking)—Handbooks, manuals, etc.)
(Anikin, V.M.) (Lukashin, IU.S.)

KLUSOV, I.A.; SAFARYANTS, A.R.

Reliability of automatic transfer machines for checking and sorting parts. Izm. tekh. no.5:5-8 My '65.
(MIRA 18:8)

KLUSOV, I.A., kand.tekhn.nauk; SAFARYANTS, A.R., inzh.

Synthesis of transfer-type machine tools. Mekh.i avtom.proizv. 16 no.7:15-20 Jl '62. (MIRA 15:8)
(Machine tools)

SAFARYANTS A.R

KLJUSZOV, I.A. [Klyusov, I.A.] (Szovjetunio); SZAFARJANC, A.R. [Safaryants, A.R.] (Szovjetunio); BORISZ, B.P. [Boris, B.P.] (Szovjetunio); MAHANEK, M.E. [Makhanek, M.Ye.] (Szovjetunio); HOROS, B.I. (Szovjetunio); BELJAJEV, Sz.F. [Belyayev, S.F.] (Szovjetunio); ALEKSZEJEV, V.N. [Alekseyev, V.N.] (Szovjetunio)

Application of rotor series. Technika 6 no.12:2-3 D '62.

SAFAR'YANTS, E.; KUZNETSOV, V., prof.; ABDUNAZAROV, N.; BABAYEV, M.; TRET'YAKOV, V.

Norms for the output of meat products. Mias. ind. SSSR 30 no.5:28-29 '59. (MIRA 13:1)

1.Glavnyy vetvrach Ashkhabadskogo myasokombinata (for Safar'yants). 2.Turkmenskiy sel'skokhozyaystvennyy institut (for all except Safar'-yants).

(Meat industry)

KUZNETSOV, V., prof.; SAFAR'YANTS, E.

Suggested standards for cattle and meat. Mias.ind. SSSR 31 no.6:28 '60. (MIRA 13:12)

1. Turkmenskiy sel'skokhozyaystvenny institut (for Kuznetsov).
2. Ashkhabadskiy myasokombinat (for Safar'yants).
(Cattle--Standards) (Meat--Standards)

SAFAR'YANTS, E.; ZUYEV, A.

Device for the automatic AK-40 machine. Mias.ind. SSSR 34 no.3: 48 '63. (MIRA 16:7)

1. Ashkhabadskiy myasokombinat.

KUZNETSOV, V., prof.; TRET'YAKOV, V., kand. vet. nauk; SAFAR'YANTS, E.

Weight losses during the preslaughter holding of Karakul sheep after their feeding with cottonseed hulls. Mias. ind. SSSR 34 no.5:33-34 '63. (MIRA 16:11)

1. Turkmenskiy sel'skokhozyaystvennyy institut (for Tret'yakov). 2. Ashkhabadskiy myasokombinat (for Safar'yants).

SAFARZADE, Akper Kara ogly; VELIBEKOV, A.A., red.; AL'TMAN, T.B., red. izd-va

[Extracting casing-head gas from deep wells] Voprosy otbora zatrubnogo gaza iz glubinnonasosnykh skvazhin. Baku, Azerbaidzhanskoe gos.izd-vo neft. i nauchno-tekhn.lit-ry, 1959. 122 p. (MIRA 13:3)

(Gas, Natural)

IBAD-ZADE, Yusif Alikulu ogly; ZOLIN, M.L.; SAFAR-ZADE, A.K.; ORLOVA, V.P., red.; BALLOD, A.I., tekhn.red.; MAKHOVA, N.N., tekhn.red.

[Raising the level of ground water for irrigation and water supply] Pod"em podzemnykh vod dlia obvodneniia i oroshenila. Pod red. IU.A.Ibad-Zade. Moskva, Gos.izd-vo sel'khoz.lit-ry, 1959. 247 p. (MIRA 13:2)

1. Deystvitel'nyy chlen Akademii sel'skokhoz.nauk Azerb.SSR (for Ibad-zade).
(Water, Underground)

SAFARZYNSKA, Irena; GONCIARZ, Zbigniew; KOKOT, Franciszek

A case of acute promyelocytic leukemia with fibrinogen deficiency. Pol. arch. med. wewnet. 34 no.6:785-787 '64

1. Z III Kliniki Chorob Wewnetrznych Slaskiej Akademii Medycznej w Katowicach (Kierownik: prof. dr. med. K. Gibinski).

SAFARZYNSKA-RYBKA, Irena

Tobacco smoke as a carcinogenic factor. Polski tygod. lek. 11 no.49:2084-2087 3 Dec 56.

1. (Z III Kliniki Chorob Wewnetrznych Slaskiej A.M., kierownik: prof. dr. med. Kornel Gibinski) Bytom, Batorego 15. III Klin. Chor. Wewn. Sl. A.M.

(SMOKING, injurious effects, cancer (Pol))
(NEOPLASMS, etiology and pathogenesis, smoking (Pol))

SAFARZYNSKA-RYBKA, Irena; KUBISTY, Wladyslaw; ROMANOWSKI, Bogdan

Case of neurosarcoma of the stomach. Polskie arch. med. wewn. 28 no.6: 909-916 1958.

1. Z III Kliniki Chorob Wewnetrznych Sl. A. M. w Bytomiu Kierownik: prof. dr med. K. Gibinski Z Oddzialu Chirurgicznego Szpitala Nr i w Bytomiu Kierownik: dyr. dr med. Wl. Kibisty Z Zakladu Radiologii Lekarskiej Sl. A. M. w Zabrzu Kierownik: prof. dr med. S. Jamuszkiewicz. Adres autora: Byrom. Batorego 15. III Klinika Chorob Wewn. A. M.

(STOMACH NEOPLASMS, case reports
fibrosarcoma (Pol))
(FIBROSARCOMA, case reports
stomach (Pol))

SAFARZYNSKA-RYBKA, Irena; LESZEK, Giec

Biochemical investigations of venous blood of the extremities in obliterative vascular diseases. VI. Aldolase. Polskie arch. med. wewn. 29 no.6:783-786 1959.

1. Z III Kliniki Chorob Wewnetrznych Sl. Akad. Med. w Bytomiu Kierownik: prof. dr med. K. Gibinski.
(ALDOLASE, blood) (VASCULAR DISEASES PERIPHERAL, blood)

KULICZ, Adam; SAFARZYNSKA-RYBKA, Irena

A case of false diverticulosis (Barsonyi's syndrome. Polski tygod. lek.15 no.10:361-363 7 Mr '60.

1. Z Zakladu Radiologii Szpitala Zespolonego no.2 w Bytomiu; kierownik: dr.med. Bohdan Romanowski i z II Kliniki Chorob Wewnetrznych Sl. A.M. w Bytomiu; kierownik: prof. dr.med. Kornel Gibinski.
(ESOPHAGUS dis.)

SAFARZYNSKA-RYBKA, Irena

Antiproteolytic activity of urine in chronic kidney diseases.
Polski tygod. lek. 16 no.16:604-605 16 Ap '61.

1. Z III Kliniki Chorob Wewnetrznych Sl. A.M. w Bytomiu; kierownik: prof. dr med. Kornel Gibinski.

(PROTEASES antag) (KIDNEY DISEASES urine)

SAFARZYNSKA-RYBKA, Irena; CZECH-JURECZKO, Czeslawa

Biochemical studies on the venous blood from extremities with obliterative vascular changes. IX. Trypsin inhibitor. Pol. arch. med. wewnet. 34 no.11:1451-1455 '64.

1. Z III Kliniki Chorob Wewnetrznych Slaskiej Akademii Medycznej w Katowicach (Kierownik: prof. dr. med. K. Gibinski).

SAFATOV, A., mekhanik

Seven navigation seasons without opening the fire tubes. Rech. transp. 14 no.5:9 My '55. (MLRA 8:7)

1. Parokhod "Andrey Zhdanov". Parokhodstvo "Volgotanker"
(Boilers, Marine)

NIKANDROVA, V.N.; SAFATINOVA, V.A.

Moldavian vermouth. Trudy MNIIP 4:28-37 '64. (MIRA 18:1)

VASIL'YEVA, N.V.; PALETSKIY, G.V.; ALIYEV, Ya.Yu.; SULTANOV, A.S.; BOKOVA, V.I.; SAFAYEV, A.S.

Commercial production of the catalyst for the removal of sulfide impurities in the hydrofining of benzene. Uzb. khim. zhur. no.2: 73-75 '59. (MIRA 12:7)

1.Institut khimii AN UzSSR i Gosudarstvennyy Chirchikskiy elektrokhimicheskiy kombinat.
(Benzene) (Catalysts)

SULTANOV, A.S.; VASIL'YEVA, N.V.; ALIYEV, Ya.Yu.; SAFAYEV, A.S.; MONAKOV, M.I.

Catalytic hydrofining of benzene in removing sulfur impurities. Uzb.khim.zhur. no.4:48-53 '59. (MIRA 13:1)

1. Institut khimii AN UzSSR.
(Benzene) (Sulfur)

SULTANOV, A.S.; VASIL'YEVA, N.V.; ALIYEV, Ya.Yu.; SAFAYEV, A.S.; MONAKOV, M.I.

Hydrogenation of benzene on a skeleton nickel-molybdenum catalyst with an oxide surface. Dokl. AN Uz. SSR no.9:30-32 '59. (MIRA 13:1)

1. Institut khimii polimerov AN UzSSR. Predstavleno chlenom-korrespondentom AN UzSSR Kh. U. Usmanovym.
(Benezene) (Hydrogenation) (Catalysts)

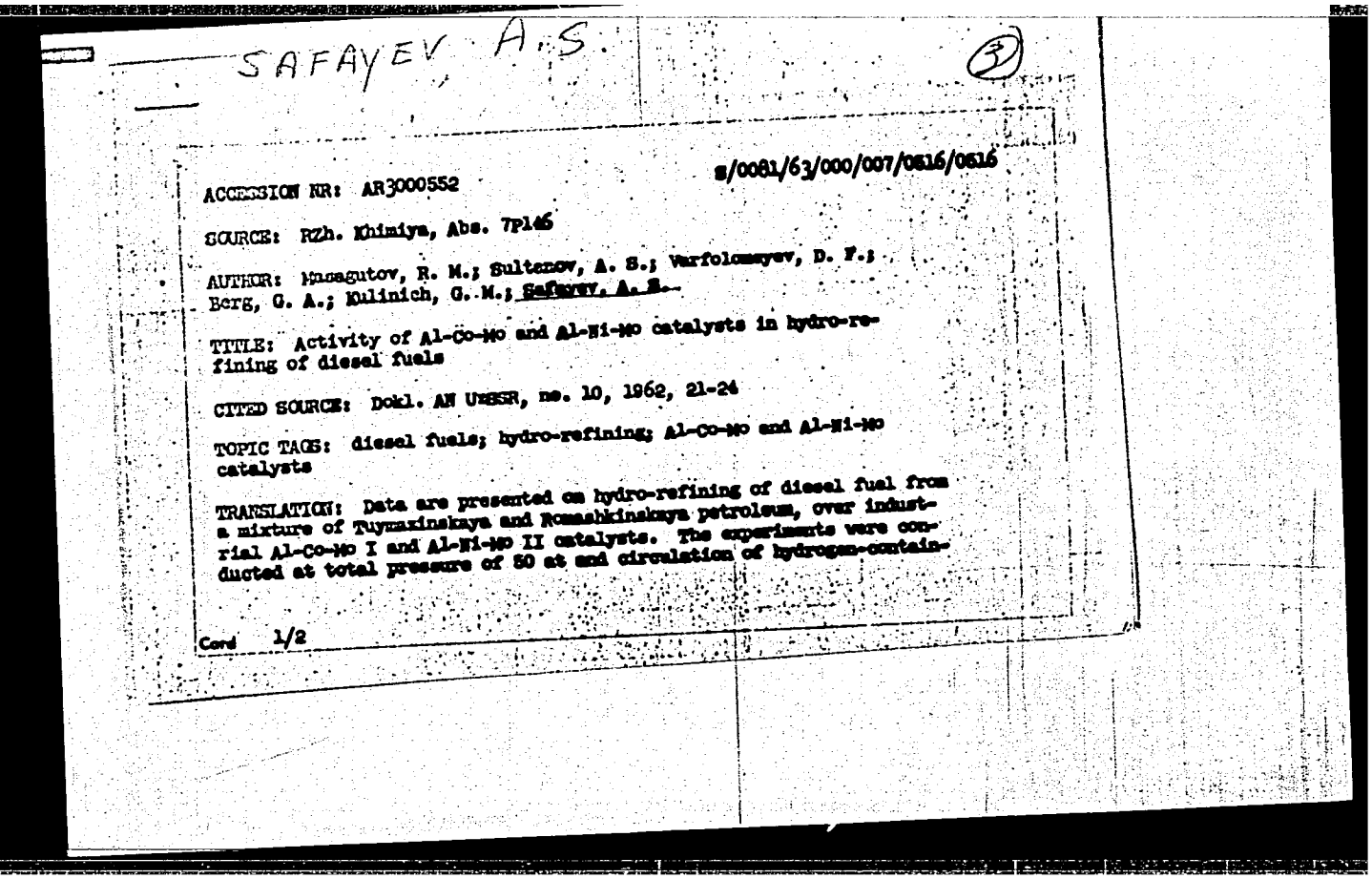
SULTANOV, A.S.; VASIL'YEVA, N.V.; SAFAYEV, A.S.

Synthesis of piperidine by the contact hydrogeneration of pyridine in a flow system. Uzb. khim. zhur. no.1:81-87 '60. (MIRA 14:4)

1. Institut khimii polimerov AN UzSSR.
(Piperidine) (Pyridine) (Hydrogenation)

SAFAYEV, A. S.

Cand Chem Sci - (diss) "Catalytic hydrogenation of benzene and pyridine." Tashkent, 1961. 14 pp; (Academy of Sciences Uzbek SSR, Joint Academic Council for Chemistry of the Division of Geological-Chemical Sciences); 170 copies; price not given; (KL, 6-61 sup, 199)



SAFAYEV, A.S.

(3)

ACCESSION NR: AR3000552 S/0081/63/000/007/0816/0816

SOURCE: RZh. Khimiya, Abs. 7P145

AUTHOR: Musagutov, R. M.; Sultanov, A. S.; Varfolomeyev, D. F.; Berg, G. A.; Kulinich, G. M.; Safayev, A. S.

TITLE: Activity of Al-Co-Mo and Al-Ni-Mo catalysts in hydro-refining of diesel fuels

CITED SOURCE: Dokl. AN UzbSSR, no. 10, 1962, 21-24

TOPIC TAGS: diesel fuels; hydro-refining; Al-Co-Mo and Al-Ni-Mo catalysts

TRANSLATION: Data are presented on hydro-refining of diesel fuel from a mixture of Tuymazinskaya and Romashkinskaya petroleum, over industrial Al-Co-Mo I and Al-Ni-Mo II catalysts. The experiments were conducted at total pressure of 50 at and circulation of hydrogen-contain-

Card 1/2

ACCESSION NR: AR3000552

ing gas of 500 rated liters/liter raw material. In the first series of experiments, with a space velocity of raw material feed of 2.0 hour sup -1, average temperature in the reactor varied from 250 to 410°; in the 2nd series the temperature was maintained at 380° and space velocity of raw material feed was 1.0-5.0 hour sup -1. At hydro-refining temperatures up to 320° the extent of desulfurization over II increases, and in the temperature range above 350° it becomes 10% higher than the extent of desulfurization over I. Under the conditions of a hydro-refining at a temperature above 400° a decomposition of the raw material is observed. At the same time the extent of desulfurization over II, at all the investigated space velocities of raw material feed, is approximately 10% higher than over I. The data obtained show that II is more active in hydro-refining of diesel fuel to remove the S-compounds; its use makes it possible to increase space velocity of raw material feed by more than 2 times, in comparison with the results obtained over I. At the same time the product is purified from S- compounds to the extent of 85%. A. Bagatkina

DATE ACQ: 21May63 ENCL: 00 SUB CODE: 00

Card 2/2

SULTANOV, A.S.; AZERBAYEV, I.N.; SAFAYEV, A.S.; ARIFDZHANOV, A.

Production of ethyl formate on calcium phosphate. Vest. AN Kazakh. SSR 20 no.8:24-32 Ag '64.
(MIRA 17:11)

ARIFDZHANOV, A.; SAFAYEV, A.S.; SULTANOV, A.S.

Production of ethyl formate by the esterification of formic acid and ethyl alcohol on aluminum phosphates. Dokl. AN Uz. SSR 21 no.9:33-36 '64. (MIRA 19:1)

1. Institut ispol'zovaniya topliva Gosudarstvennogo neftekhimicheskogo komiteta pri Gosplane SSSR.

SAFAYEV, A.S.; SULTANOV, A.S.; MASAGUTOV, R.M.; MIRUSMANOVA, M.; BERG, G.A.

Catalyst for the hydrocracking of sulfurous petroleum products. Dokl. AN Uz. SSR 21 no. 11:50-52 '64. (MIRA 18:12)

1. Institut ispol'zovaniya topliva pri Gosudarstvennom komitete khimicheskoy i neftyanoy promyshlennosti pri Gosplane SSSR. Submitted March 20, 1964.

UL'MASOV, A.U., kand. ekon. nauk; UL'MASBAYEV, Sh.N., doktor ekon. nauk; DZHAMALOV, O.B., doktor ekon. nauk; BLINDER, I.B., kand. ekon. nauk; KHODZHAYEV, S.M., kand.ekon. nauk; RASULEV, M., kand. ekon. nauk; SABIROV, Kh.R., kand.ekon. nauk; SAFAYEV, A.S., kand. ekon. nauk; ABDULLAYEV, M.A., kand. ist. nauk; ABDURAIMOV, M.A., kand. ist. nauk, red.; AMINOV, A.M., doktor ekon. nauk, red.; MIL'MAN, Z.A., red.; GOR'KOVAYA, Z.P., tekhn. red.

[History of the national economy of Uzbekistan]Istoriia narodnogo khoziaistva Uzbekistana. Tashkent, Izd-vo Akad. nauk Uzbekskoi SSR. Vol.1. 1962. 389 p. (MIRA 16:1)

1. Akademiya nauk Uzbekskoy SSR, Tashkend. Institut ekonomiki. (Uzbekistan--Economic conditions)

SAFAYEV, I. (g. Vladimir).

First Spartakiad in the province. Prom.koop. no.6:40 Je '57.
(MIRA 10:7)

1. Nachal'nik USO oblastnogo soveta obshchestva "Spartak."
(Vladimir Province--Sports)

ZHITNITSKAYA, E.A.; GORODILOVA, L.I.; SAFAROV, G.I.; ARTYKOV, M.B.; ARASHEV, A.A.; SAFAYEVA, D.B.

Organization of measures for the eradication of an ankylostomiasis focus in Karakul District, Bukhara Province. Med. paraz. i paraz. bol. 33 no.6:707-710 N-D '64. (MIRA 18:6)

1. Uzbekskiy institut eksperimental'noy meditsinskoy parazitologii i gel'mintologii, Bukharskaya oblastnaya sanitarno-epidemicheskaya stantsiya i Karakul'skaya tsentral'naya rayonnaya bol'nitsa.

SAFAYEVA, K.

Use of the method of potentials in solving the three-index transportation problem. Vop. vych. mat. i tekh. no.1:129-143 '64. (MIRA 18:8)

SAFIR, G.

Land, naval, and air transportation at the start of the second Five-Year Plan.

P. 7, (Revista Transporturilor. Vol. 3, o. 1, Jan. 1956, Bucuresti, Rumania)

Monthly Index of East European Accessions (EPAI) LC. VOL. 7, no. 2,
FEbruary 1958

SAFER, G.

SAFER, G. On the occasion of the 2d Congress of the Scientific Association of Rumanian Engineers and Technicians. p. 369.

Vol. 3, no. 10, October 1956
REVISTA TRANSPORTURILOR
TECHNOLOGY
Bucuresti, Rumania

So: East European Accession, Vol. 7, no. 3, March 1957

SAFERNA, J.

"Series capacitors for voltage regulation."

Pt. 2. p. 310 (Energetyka) Vol. 11, no. 6, Nov./Dec. 1957
Warsaw, Poland

SO: Monthly Index of East European Accessions (EEAI) LC. Vol. 7, no. 4, April 1958

SAFERNA, J.

Protection of series capacitors from disturbances and damages.

P. 21. (ENERGETYKA) (Warszawa, Poland) Vol. 12, no. 1, Jan. 1958

SO: Monthly Index of East European Accession (EEAI) LC Vol. 7, No. 5, 1958

SAFERNA, J.; GAJEWSKI, J.

Problems of reactive power in the system of the Southern Power District. Pt. 1 (to be cont.) p. 101

ENERGETYKA (Ministerstwo Gornictwa i Energetyki oraz Stowarzyszenie Elektrykow Polskich) Bytom, Poland. Vol. 13, no. 4, Apr 1959

Monthly List of East European Accessions (EEAI) LC, Vol. 8, no. 9, September 1959. Uncl.

SAFERNA, J.; GAJEWSKI, J.

Problems of reactive power in the system of the Southern Power District. Pt. 2. p. 127

ENERGETYKA (Ministerstwo Gornictwa i Energetyki oraz Stowarzyszenie Elektrykow Polskich) Bytom, Poland. Vol. 13, no. 5, May 1959

Monthly List of East European Accessions, (EEAI) LC, Vol. 8, no. 9, September 1959. Uncl.

SAFERNA, Jerzy, mgr inz.

Synchronous condensers in 110 kv. and 220 kv. networks. Energetyka (EEAI 9:6)
Pol 14 no.2:42-45 '60.
(Condensers (Electricity)) (Electric networks)

SAFERNA, Jerzy, mgr inz.

The exploitation and laying of power cables in sunken mining areas. (EEAI 9:8)
Energetyka Pol 14 no.3:85-88 Mr '60.
(Electric cables) (Mining engineering)

SAFERNA, Jerzy, mgr inz.

Inspection of joints of high-tension lines and substations. Energetyka (EEAI 9:10)
Pol 14 no.4:124-125 Ap '60.
(Electric power)

ROGON, Alojzy, mgr.,inz.; SAFERNA, Jerzy, mgr.,inz.

Live-washing of electric-power plant insulators. Energetyka Pol 15 no.11:343-348 '61.

1. Zjednoczenie Energetyczne Okregu Katowice (for Rogon). 2. Zaklad Energetyczny Gliwice (for Saferna).

SAFERNA, Jerzy, mgr inż.

Industrial safety in electric power production and distribution in the German Democratic Republic. Energetyka Pol 17 no.2:58-59 F '63.

SAFERNA, Jerzy, mgr inż.

Mechanization of the maintenance operations of electric networks in the German Democratic Republic. Energetyka Pol 17 no.4:119-120 Ap '63.

SAFERNA, Jerzy, mgr inz.

Testing methods of the suitability of insulators for overhead networks in areas with polluted air. Energetyka Pol 18 no. 7: 205-208 Jl '64.

1. Power Plant, Gliwice.

SAFFA, Dezider, inz.; MRAZ, Alexander; KANCIR, Ondrej

New type coverter station MR 59. Zel dop tech 11 no.8:224-227 '63.

SAFFARIC, B.

"Lactose content and its variations in the milk of the spotted Simmental bovine breeds," by [Zavod za mljekarstvo Poljoprivrednog fakulteta Univerziteta, Beograd] Lj. Ajdanic. Reviewed by B. Saffaric. Bul sc Youg 7 no.3:85 Je '62.

SAFFARIC, B.

"Contribution to the genetic classification of soils" by M. Gracanin. Reviewed by B. Saffaric. Bul sc Youg 7 no.4/5: 137 Ag-O '62.

SAFFARIC, B.

"Agriculture" by S. Miletic, K. Stampar, S. Varic, F. Piser, N. Plavsic-Gojkovic, B. Horvat, M. Pesut, V. Hsran, J. Pajalic, M. Car, J. Gotlin, P. Pavlek, A. Znidar, M. Petek, J. Brcic, D. Sabados, Z. Finci, M. Nuskern, S. Romic, I. Balzer, H. Zlatic, D. Bajic, Lj. Bozic, B. Korica, J. Kovacevic, I. Marincic, Z. Cindric, J. Cipot, V. Vitolovic, A. Petricic, F. Boko, J. Batinica, A. Tafro-Hadzic, V. Beljin, V. Radulovic, O. Pancer. Reviewed by B. Saffaric. Bul sc Youg 7 no.4/5:133-137 Ag-O '62.

1. Redacteur d'extraits, "Bulletin scientifique".

SAFIAN, Metody (Oborniki Wlkp., ul. Obrzycka 117.)

Piotr Wedlicki from Oborniki Wlk., rector of the Cracov Academy & court physician of King Sigismond the Old. Polski tygod. lek. 14 no.14:648-650 6 Apr 59.

(BIOGRAPHIES
Wedelicki, Piotr (Pol))
(HISTORY, MEDICAL
in Poland, contribution of Piotr Wedelicki (Pol))

SAFIER, J.; TRYNKA, B.

Effect of vitamin B12 and of vitamin B12 analogue obtained through biosynthesis on the development of transplantable Guerin's cancer in rats. Acta physiol. polon. 8 no.3:518-519 1957.

1. Z Zakladu Patologii Ogolnej i Doswiadczalnej A. M. w Szczecinie. Kierownik: doc. dr J. Makowski.

(NEOPLASMS, experimental,
Guerin's transplantable tumor, eff. of vitamin B12 & vitamin B12 analogues (Pol))
(VITAMIN B12, effects,
exper. Guerin's transplantable rumor)

SAFIN, A.

Lodestar. Sovshakht. 10 no.10:9-10 O '61. (MIRA 14:12)

1. Sekretar' partbyuro shakhty no.47 kombinata Chelyabinskugol'.
(Communist Party of the Soviet Union--Congresses)
(Coal miners)

SAFIN, F.F.

Apparatus for repositioning fractures in forearm fractures. Ortop. travm. i protez. 20 no.1:70-71 Ja '59. (MIRA 12:3)

1. Iz Kazanskogo nauchno-issledovatel'skogo instituta vosstanovitel'noy khirurgii i ortopedii (dir. - zasluzhennyy deyatel' nauki Tatarskoy ASSR prof. L.I. Shulutko).
(FOREARM, fract.
appar. for repositioning (Rus))

SAFIN, F.F., mladshiy nauchnyy sotrudnik

Portable apparatus for repositioning fractures of both bones of the forearm. Ortop.,travm.i protez. 20 no.12:42-43 D '59. (MIRA 13:5)

(FOREARM fracture & dislocation)
(FRACTURES equipment & supplies)

SAFIN, F.F. (Kazan', Tukayevskaya ul., d.130, kv. 13)

Treatment and functional restoration in diaphyseal fractures of the forearm. Ortop., travm. i protez. 25 no.8:15-21 Ag '64. (MIRA 18:4)

1. Iz Kazanskogo instituta travmatologii i ortopedii (dir. - starshiy nauchnyy sotrudnik U. Ya. Bogdanovich).

SAFIN, M.

Reducing the cost of gas transportation. Gaz. delo no.8:50-52 '63. (MIRA 17:3)

1. Ufimskoye upravleniye magistral'nykh gazprovodov.

SAFIN, I.A.

Nuclear quadrupole relaxation in some modifications of copper oxide. Fiz. tver. tela 3 no.9:2874-2876 S '61. (MIRA 14:9)

1. Fiziko-tekhnicheskiy institut Kazanskogo filiala AN SSSR.
(Nuclear magnetic resonance and relaxation)
(Copper oxide)

S/181/62/004/005/047/055
B164/B102

AUTHOR: Safin, I. A.

TITLE: The nuclear quadrupole resonance spectrum of $Sb^{121,123}$ in polycrystalline SbI_3

PERIODICAL: Fizika tverdogo tela, v. 4, no. 5, 1962, 1368

TEXT: This nuclear quadrupole resonance study at 77°K was made by the pulse method described by the author in FTT 3, 2874, 1961. The transition observed at 25.40 Mc/sec, which had already been discovered by S. Ogawa (J. Phys. Soc. Japan, 13, 618, 1958), is probably not a $\pm 3/2 \leftrightarrow \pm 1/2$ transition, as investigations with a weak magnetic field have shown that the modulation of spin-echo signals characteristic of such transitions is absent. It is therefore assumed that the transition in question is a $|m| \leftrightarrow |m|-1$ transition with $|m| \neq 3/2$. The transition $\pm 5/2 \leftrightarrow \pm 3/2$ for Sb^{121} is found to occur at 25.40 Mc/sec, and the transition $\pm 7/2 \leftrightarrow \pm 5/2$ for Sb^{123} lies at 23.10 ± 0.01 Mc/sec. The quadrupole coupling constant $(eqQ)_{Sb^{121}} = 84.67$ Mc/sec and a parameter of asymmetry $\eta < 0.01$ are obtained

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S/058/61/000/010/052/100
A001/A101

AUTHOR: Safin, I.A.

TITLE: Equipment for studying nuclear quadrupole resonance

PERIODICAL: Referativnyy zhurnal.Fizika, no.10, 1961, 165, abstract 10V371 (V sb. "Paramagnitn. rezonans", Kazan', Kazansk. un-t, 1960, 166-169)

TEXT: The author describes equipment for observation of signals of nuclear quadrupole resonance. A superregenerative detector was employed and signals are registered by the method of double frequency modulation (sinusoidal with frequency 71-820 cps and linear with the speed of oscillograph beam scanning). The first and the second derivatives of absorption signals are registered. Synchronous detecting is employed. Signals from para-dichlorobenzene were observed at room temperature.

N. Pomerantsev

[Abstracter's note: Complete translation]

Card 1/1

SAFIN, I.A.

Nuclear quadrupole resonance spectrum of $Sb^{121,123}$ in polycrystalline SbI_3. Fiz. tver. tela 4 no.5:1368 My '62. (MIRA 15:5)

1. Fiziko-tekhnicheskiy institut Kazanskogo filiala AN SSSR.

(Nuclear magnetic resonance and relaxation)
(Antimony iodide)

S/020/62/147/002/019/021
B101/B186

AUTHORS: Safin, I. A., Pen'kov, I. N.

TITLE: Nuclear quadrupole resonance in stibnite

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 147, no. 2, 1962, 410-413

TEXT: The nuclear quadrupole resonance (n.q.r.) spectra of natural stibnite single crystals of Sb^{121} and Sb^{123} nuclei situated in chemically nonequivalent positions A and B (Fig. 1) were recorded (Table 1) by the pulse method (I. A. Safin, Pribory i tekhn. eksp., no. 3, 98 (1962)). Results: (1) A maximum of four lines was observed for the A nuclei of Sb, i.e., there are only two systems of the principal tensor axis of the electric field gradient for position A. If the magnetic field lies in the ac plane and is parallel to the c axis the n.q.r. line is not split. Splitting in two components occurs with other H_0 directions. The z axes of the two systems of the principal tensor axes of the electric field gradient form an angle of 90° with the c axis, and $56 \pm 1^\circ$ with the a axis. (2) For B nuclei: If the magnetic field lies in the ac plane, no splitting occurs with any direction of H_0, i.e., the z axis coincides for B nuclei with the b axis of crystals. (3) The width T_2^* of the resonance line of

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Nuclear quadrupole resonance in...

Gaussian form is weakly temperature-dependent whereas T_2' (the nonsecular part of the width determining the form of the signal envelope) varies with temperature. Diffusion of defects in the Sb_2S_3 lattice at room temperature is assumed to be the cause of this. The deviating form of the envelope for the $+ 1/2 \leftrightarrow + 3/2$ transitions is assumed to be caused by beats owing to the multiplet structure of the n.q.r. lines. The splitting of the n.q.r. lines is due to indirect interaction of the nuclear spins of Sb^{121} and Sb^{123} and to the effect of the terrestrial magnetic field. (4) The spin-lattice relaxation time T_1 at 77°K is $4.3 \cdot 10^{-3}$ sec ($\pm$ 10%) for the $+1/2 \leftrightarrow +3/2$ transitions of the A nuclei, and $11.8 \cdot 10^{-3}$ sec ($\pm$ 10%) for the B nuclei. (5) The eQq constants (quadrupole coupling constants) suggest sp hybridization of the A complexes, whereas the B complexes form Sb_4S_6 dimers. The double bonds of these dimers render the rotation of complexes difficult. This explains the differences in T_1 and the temperature gradients $d\nu/dT$ for A and B nuclei. No n.q.r. effects were observed for artificial Sb_2S_3 samples, probably because their lattice is little ordered. There are

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2 figures and 1 table. The most important English-language reference is: T. Wang, Phys. Rev., 99, 566 (1955).

ASSOCIATION: Fiziko-tekhnicheskiy institut Kazanskogo filiala Akademii nauk SSSR (Physicotechnical Institute of the Kazan' Branch of the Academy of Sciences USSR)

PRESENTED: June 29, 1962, by B. A. Arbuzov, Academician

SUBMITTED: June 22, 1962

Fig. 1. Unit cell of stibnite projected onto the ab plane of the crystal (above); relative orientation of the crystal axes and of the principal axis of the electric field gradient for positions A and B of Sb^{121} and Sb^{123} nuclei. Distances in Å.

Table 1. Legend: (1) Position of nuclei in the lattice; (2) transition; (3) resonant frequency, Mc/sec; (4) T_2, μsec ± 10%; (5) $\Delta\nu$, kc/sec ± 10%; (6) eQq, Mc/sec, 77°K; (7) $d\nu/dT$, kc/deg.

S/120/62/000/003/023/048
E039/E135

AUTHOR: Safin, I.A.

TITLE: Measurement of nuclear quadrupole relaxation time

PERIODICAL: Pribory i tekhnika eksperimenta, no.3, 1962, 98-102

TEXT: Description of a pulse apparatus for the detection of nuclear magnetic resonance spectra and measurement of nuclear quadrupole relaxation times in the frequency range 20-150 Mc/s. The experimental observation of a nuclear quadrupole resonance line having a width ~10 Kc/s requires a radio-frequency pulse length t_i ~4 μsec (if it is assumed that $t_i \sim T_2^*/10$ where T_2^* is the width of the resonance line) and the intensity of the radio-frequency magnetic field in the sample ~100 oersted (for Cl nucleus). For a sample containing a nucleus with spin $I = 3/2$ subjected to the action of a magnetic radiofrequency field $2H_1 \cos \omega t$ in the form of a short intense pulse of length $t_i \ll T_2^*$; and assuming that the nucleus is in an axially symmetrical electric field perpendicular to the direction of the radiofrequency magnetic field and also that the form of the resonance line is Gaussian, then the amplitude of the free

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inductive signal is given by:

$$\sin\left(\sqrt{3}\,\gamma H_1 t_i\right) \exp\left[-\frac{(t - t_i)^2}{2T_2^{*2}}\right]$$

where γ is the hydromagnetic ratio for the investigated nucleus. The conditions for maximum signal are discussed and results of measurements on the Cu^{63} nucleus in powdered Cu_2O (transitions $\pm 1/2 \leftrightarrow \pm 3/2$) and the Sb^{121} nucleus in powdered $SbCl_3$ (transitions $\pm 1/2 \leftrightarrow \pm 3/2$ and $\pm 3/2 \leftrightarrow \pm 5/2$) are given. There are 2 figures.

ASSOCIATION: Fiziko-tekhnicheskiy institut Kazanskogo filiala AN SSSR (Physicotechnical Institute, Kazan' Branch, AS USSR)

SUBMITTED: September 20, 1961

Card 2/2

SAFIN, I.A.

Nuclear quadrupole resonance in some compounds of arsenic, antimony, and bismuth. Zhur.strukt.khim. 4 no.2:267-269 Mr-Ap '63. (MIRA 16:5)

1. Fiziko-tekhnicheskiy institut Kazanskogo filiala AN SSSR.
(Arsenic compounds--Spectra) (Antimony compounds--Spectra)
(Bismuth compounds--Spectra)

L 64715-65 EWT(1)/EWT(m)/EWP(c)/EWP(j) IJP(c) WW/GG/RM

ACCESSION NR: AR5012277 UR/0058/65/000/003/D058/D058

SOURCE: Ref. zh. Fizika, Abs. 3D462

AUTHOR: Biryukov, I. P.; Safin, I. A.; Voronkov, M. G.

TITLE: Investigation of the nuclear quadrupole resonance spectra of tetrachlorosilane and dimethyldichlorosilane

CITED SOURCE: Izv. AN LatvSSR. Ser. khim., no. 6, 1963, 695-699

TOPIC TAGS: nuclear spectroscopy, line spectrum, resonance line, nuclear quadrupole resonance

TRANSLATION: Resonance frequencies, line widths and signal intensity ratios of nuclear quadrupole resonance are measured in $(CH_3)_2SiCl_2^{35}$, $SiCl_4^{35}$ and $SiCl_4^{37}$. Devices which operate on the stationary method and the pulse method were used for the measurements. V. Bystrov.

SUB CODE: NP ENCL: 00

Card 1/1

PEN'KOV, I.N.; SAFIN, I.A.

Nuclear quadrupole resonance in realgar. Dokl. AN SSSR 153 no.3:692-693 N '63. (MIRA 17:1)

1. Kazanskiy gosudarstvennyy universitet im. V.I. Ul'yanova-Lenina i Fiziko-tekhnicheskiy institut Kazanskogo filiala AN SSSR. Predstavleno akademikom N.V. Belovym.

L 16707-65 EWT(m)/EPF(c)/EWP(j) Pa-4/Pc-4/Pr-4 AS(mp)-2 RM
ACCESSION NR: AR5000783 S/0058/64/000/010/D040/D040

SOURCE: Ref. zh. Fizika, Abs. 10D315

AUTHORS: Lyukov, I. P.; Safin, I. A.; Voronkov, M. G.

TITLE: Nuclear quadrupole resonance of certain organyl chlorosilanes and chlorogermanes

CITED SOURCE: Izv. AN LatvSSR. Ser. khim., no. 2, 1964, 181-184

TOPIC TAGS: nuclear quadrupole resonance, piezoelectric property, organochlorosilane, organochlorogermane

TRANSLATION: The NQR spectra of 7 organylchlorosilanes and -germanes were investigated. Piezoelectric resonance signals were observed in methyl trichlorogermane, indicating that this compound has piezoelectric properties. A doublet of the NQR signal was obtained in dimethyl trichlorogermane. The NQR spectra of phenyl trichloro- and chlorophenyl trichlorosilanes are triplets. One NQR signal was observed in the NQR spectrum of dichlorophenyltri- and methyl vinyl dichlorosilanes. A more exact value is obtained for the NQR triplets for vinyl

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L 16707-65
ACCESSION NR: AR5000783

0

trichlorosilane. The widths of the lines for the observed signals were estimated. It is concluded that a regular chemical non-equivalence of the second kind of the positions of the Cl atoms in the unit crystal lattice occurs in compounds of the type $R_{4-n}MCl_n$.

ENCL: 00

SUB CODE: NP, OC

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