BELYAYEVA, Z.; BUDARIN, V.; VASHENTSEVA, Ye.; KOPTEV, M.; KOROLEV, S.; MESHCHERYAKOV, V.; SEMIN, S.; KONAKOV, D., otv.red.; ROCHKO, V., red.; SOSKIN, A., red.

[Political economy; a manual of visual aids] Politicheskaia ekonomiia; nagliadnoe posobie. Otvetstvennyi red. D.Konakov. Moskva, Gos.izd-vo polit.lit-ry, 1959. 159 p. (MIRA 13:3)
(Economic history) (Audio-visual aids)

SEMIN, Sergey Ivanovich, kand. ekonom. nauk;KOMAROVA, T.F., red.; SAVCHENKO, Ye.V., tekhn. red.

[Intercollective farm cooperatives] Mezhkolkhoznye proizvodstvennye ob"edineniia. Moskva, Izd-vo "Znanie," 1960. 29 p. (Vsesoiuznoe obshchestvo po rasprostraneniiu politicheskikh i nauchnykh znanii. Ser.3, Ekonomika, no.8) (MIRA 14:9)
(Collective farms—Interfarm cooperation)

BUYANOV, P.S., kand.ekonom.nauk, red.; LAPTEV, I.D., prof., red.; SEMIN, S.I., kand.ekonom.nauk, red.. Prinimala uchastiye SUVOROVA, L.I., mladshiy nauchnyy sotrudnik. RAKITINA, Ye.D., red.; BALLOD, A.I., tekhn.red.

[Developing the communal economy of collective farms] Razvitie obshchestvennogo khoziaistva kolkhozov. Moskva, Gos.izd-vo sel'-khoz.lit-ry, 1960. 294 p. (MIRA 13:8)

1. Akademiya nauk SSSR. Institut ekonomiki. 2. Institut ekonomiki AN SSSR (for Buyanov, Laptev, Semin, Suvorova).
(Collective farms)

LINKUN, N.; SEMIN, S.

American economists in the U.S.S.R. Vop. ekon. no.11:159-160 N '60.
(MIRA 13:11)

(Economists, American) (Russia--Relations(General) with the United States)

(United States--Relations(General) with Russia)

SEMIN, Sergey Ivanovich; VORONINA, N.V., red.

[Production and income of collective farms] Produktsiia i dokhody kolkhozov. Moskva, Izd-vo VPSh i AON pri TsK KPSS, 1961. 53 p. (MIRA 14:9)

(Collective farms)

SEMIN, S.

Prospects for the development of collective-farm production methods. (MIRA 14:5)
Vop.ekon. no.5:48-54 My '61.
(Collective farms)

SEMIN, Sergey Ivanovich, kand. ekonom. nauk; POTAPOV, Kh.Ye., red.; PONOMAREVA, A.A., tekhn. red.

[Undivided funds and ways to narrow the difference between collective-farm cooperative property andpublic property] Nedelimye fondy i puti sblizheniia kolkhozno-kooperativnoi sobstvennosti s obshchenarodnoi. Moskva, Izd-vo ekon.lit-ry, 1961. 180 p. (MIRA 14:11)
(Collective farms—Finance) (Property)

LAPTEV, I.D , starshiy nauchnyy sotr.; BUYANOV, P.S., starshiy nauchnyy sotr.; KASSIROV, L.N., starshiy nauchnyy sotr.; TERYAYEVA, A.P., starshiy nauchnyy sotr.; SUVOROVA, L.I., starshiy nauchnyy sotr.; SIDOROVA, M.I., starshiy nauchnyy sotr.; SEMIN, S.I., starshiy nauchnyy sotr.; Prinimali uchastiye: ARKHIPOV, A.I., mladshiy nauchnyy sotr.; VAZYULYA, P.F., mladshiy nauchnyy sotr.; KARLYUK, I.Ya., mladshiy nauchnyy sotr.; KARNAUKHOVA, Ye.I., mladshiy nauchnyy sotr.; KRYLOVA, T.N., mladshiy nauchnyy sotr.; ROMANOVSKAYA, L.S., mladshiy nauchnyy sotr.; CHISTOV, G.N., mladshiy nauchnyy sotr.; POTAPOV, Kh.Ye., red.; GERASIMOVA, Ye.S., tekhn. red.

[Communal funds of collective farms and the distribution of collective farm income] Obshchestvennye fondy kolkhozov i raspredelenie kolkhoznykh dokhodov. Moskva, Izd-vo ekon. lit-ry, 1961. 386 p. (MIRA 15:3)

1. Akademiya nauk SSSR. Institut ekonomiki. 2. Sektor ekonomiki sel'skogo khozyaystva Instituta ekonomiki Akademii nauk SSSR (for Laptev, Buyanov, Kassirov, Teryayeva, Suvorova, Sidorova, Semin).
(Collective farms--Income distribution)

SEMIN, S.

"Costs and the profitableness of collective farm production," edited by [doktor ekon.nauk, prof.] I.A. Borodin. Reviewed by S. Semin. (MIRA 15:9)
Vop. ekon. no.9:116-119 S '62.
(Collective farms—Costs) (Borodin, I.A.)

SEMIN, S.

Indivisible funds of collective farms. Vop. ekon. no.2:148-151 F '63. (MIRA 16:3)
(Collective farms--Finance)

SEMIN, S. I.

Spetsializatsiia i kooperirovanie v sovetckoi mashinostrotel'noi promyshlennosti. Moskva, 1950. 60 p. illus.

Specialization and cooperation in the Soviet machine-building industry.

DLC: TJ85.S4

SO: Manufacturing and Mechanical Engineering in the Soviet Union, Library of Congress, 1953.

Semin, S. I.

USSR/ Engineering

Card 1/1 Pub. 128 - 17/23

Authors : Semin, S. I.

Title : Capabilities of the machine construction industry

Periodical : Vest. mash. 2, 74 - 77, Feb 1955

Abstract : An analysis is given on the inconsistency and the inefficient utilization of production capacities in various plants of the machine construction industry, and suggestions are given to eliminate the above mentioned shortcomings. Tables.

Institution: .....

Submitted: .....

SEMIN, S.I., kand. ekon. nauk.

Results and outlook of the specialization in the machinery industry. Vest.mash. 38 no.10:76-78 O '58. (MIRA 11:11)
(Industrial management)

SEMIN, S.

Establishing work norms in plastics manufacture. Sots.trud 4 no.7:89-91 Jl '59. (MIRA 13:4)
(Plastics industry--Production standards)

SEMIN, Sergey Il'ich; MAKSIMOV, I.S., red.; BEREZNOY, N.I., red.; PONOMAREVA, A.A., tekhn.red.

[Efficiency of specialization and cooperation in U.S.S.R. industry] Effektivnost' spetsializatsii i kooperirovaniia v promyshlennosti SSSR. Moskva, Gosplanizdat, 1960. 172 p. (MIRA 14:3)

(Industrial organization)

SEMIN, S.I., kand.ekon.nauk, red.; KOMAROV, Ye.I., red.; MAKSIMOV, I.S., red.; GERASIMOVA, Ye.S., tekhn.red.

[Specialization and cooperation in industry; work practice of regional economic councils] Spetsializatsiia i kooperirovanie promyshlennosti; opyt raboty sovnarkhozov. Moskva, Gosplanizdat, 1960. 253 p. (MIRA 13:4)
(Industrial organization)

8(0), 32(2) SOV/112-59-3-5506

Translation from: Referativnyy zhurnal. Elektrotekhnika, 1959, Nr 3, p 174 (USSR)

AUTHOR: Semin, S. N.

TITLE: The Schedule and Outfit for Thermal Aging of RR20 Relay Controllers (Rezhim i ustanovka dlya teplovoy stabilizatsii rele-regulyatorov RR20)

PERIODICAL: Avtotrakt. elektrooborudovaniye, 1958, Nr 1, p 64

ABSTRACT: It is noted that the best method of aging RR20 relay controllers is to heat them up to 60-80°C and to vibrate the armatures of the relays and controllers by a half-wave current 50-100 cps at 11-14 v. In 30 min of such aging, the residual voltages are almost completely eliminated. Ten days of aging with heating results in a change of the controlled voltage of 0.04 v, while with the older aging method it was 0.22 v. The outfit is described in detail.

N. Ya. K.

Card 1/1

SEMIN, V. (Leningrad)

How to prepare and conduct a class. Prof.-tekh. obr. 22 no.10:40-41 O '65. (MIRA 18:10)

SMIN, V.

Collective Labor Agreements

Daily control of carrying out the collective agreement, V pom. profaktivu, 13, no. 16, 1952.

Monthly List of Russian Accessions, Library of Congress, October 1952.

UNCLASSIFIED.

SEMIN, V.

Production conferences in machine-tractor stations and state farms. Sov. profsoiyzy 5 no.4:63-65 Ap '57. (MLRA 10:6)

1. Predsedatel' Chkalovskogo oblastnogo komiteta profsoyuza rabochikh i sluzhashchikh sel'skogo khozyaystva i zagotovok.
(Chkalov Province--Agriculture)

SEMIN, V.

Force of the group initiative. Okhr.truda i sots.strakh. no.5:30-33 N '58. (MIRA 12:1)

1. Sekretar' Tul'skogo oblastnogo soveta profsoyuzov.
(Tula Province--Industrial hygiene)

SEMIN, V., starshiy tekhnolog; KRUTOV, V., starshiy inzhener

Translate into life the new and the progressive. Mor. flot 22 no.7:39 Jl '62. (MIRA 15:7)

1. Nakhodkinskiy port, (for Semin). 2. Otdel truda i zarabotnoy platy Nakhodkinskogo porta (for Krutov).
(Cargo handling—Technological innovations)

SEMIN, V.A., prepodavatel'

Designation of "VV" and "B" blocks in the network of the starting contactors of a diesel locomotive. Elek. i tepl. tiaga no.33-34 Ja '61. (MIRA 14:3)

1. Shkola mashinistov Oktyabr'skoy dorogi.
(Diesel locomotives)

S/058/62/000/012/028/048
A160/A101

AUTHORS: Akhaladze, V. P., Semin, V. I.

TITLE: An installation for supersonic measurings in the liquid in the temperature and frequency range on one quartz plate

PERIODICAL: Referativnyy zhurnal, Fizika, no. 12, 1962, 76, abstract 12G686 (In collection: "Primeneniye ul'traakust. k issled. veshchestva". M., no. 16, 1962, 177 - 182)

TEXT: A formerly-indicated possibility is used for measuring the coefficient of absorption and velocity of ultrasound in liquids in the frequency and temperature range without replacing the quartz plates. An optical installation provided with larger-size windows in the thermostating chamber was used for determining the absorption coefficient. Presented is its diagram and the design of its windows, permitting to eliminate the moisture condensate with the help of a good heat insulation, and enabling one to observe the sonic field in the chamber along its whole length. The drawing shows the quartz holder of a simplified design, used at temperatures which slightly differ from the surrounding ones, and

Card 1/2

MILOV, V.N.; SEMIN, V.I.

Obtaining thin-walled shapes by drawing them out of melts.
Lit. proizv. no.7:33-35 Jl '63. (MIRA 17:1)

KHORCSHILOV, V.A.; SEMIN, V.I.

Using calcium chloride solutions as antihydrate inhibitors. Gaz. prom. 9 no.5:34-40 '64. (MIRA 17:6)

Semin, V.M.

2

Purification of nickel electrolytes. V. M. Semin. *Metal. Pokrytiya v Khim. Mashinostroenii. Vsesoyuz. Nauch.-Issledovatel. i Konstruktor. Inst. Khim. Mashinostroeniya* (Moscow), *Sbornik Statei* 15, 163–73(1954); *Referat. Zhur., Khim.* 1954, No. 48093.—Ni electrolytes contg. no Na naphthalenedisulfonate are purified by treating them with $KMnO_4$ at 70–80°. Electrolytes contg. the sulfonate are purified by treating them with H_2O_2 at 30–40°. This oxidizes Fe. Org. impurities are adsorbed on activated C. M. Yosch

CH

SEMIN, V. M.

VAGRAMYAN, Ashot Tigranovich; IL'INA-KAKUYEVA, Tat'yana Borisovna; SEMIN,V.M., redaktor; KAMAYEVA,O.M., redaktor; ATTOPOVICH, M.K., tekhnicheskiy redaktor

[Current distribution on surface electrodes during electrodeposition of metals] Raspredelenie toka na poverkhnosti elektrodov pri elektroosazhdenii metallov. Moskva, Gos.nauchno-tekhn. izd-vo lit-ry po chernoi i tsvetnoi metallurgii, 1955. (MLRA 9:3)
66 p.

(Electroplating)

SEMIN, V.M.

LAYNER, V.I., professor, doktor; KUDRYAVTSEV, N.T., professor, doktor; GORBUNOVA, K.M., professor, doktor, retsenzent; DOKIN, N.I., inzhener, retsenzent; SEMIN, V.M., inzhener, retsenzent; CHERNOV, A.N., redaktor; KAMAYEVA, O.M., redaktor izdatel'stva; ATTOPOVICH, M.K., tekhnicheskiy redaktor.

[Principles of electroplating] Osnovy gal'vanostegii. Izd.3-e, perer.i dop. Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po chernoi i tsvetnoi metallurgii. Pt.2. 1957. 647 p. (MIRA 10:11)
(Electroplating)

137-58-6-12944

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 6, p 251 (USSR)

AUTHOR: Semin, V.M.

TITLE: Chrome Plating in Self-regulating Electrolytes (Khromirovaniye v samoreguliruyushchikhsya elektrolitakh)

PERIODICAL: V sb.: Teoriya i praktika elektrolit. khromirovaniya. Moscow, AN SSSR, 1957, pp 224-231

ABSTRACT: The composition of a Cr electrolyte (E), possessing elevated working stability and high current efficiency has been worked out. It is shown that a 250 g/liter CrO_3 solution, saturated with anions of SiF_6^{2-} 9 g/ℓ and SO_4^{2-} 2.17 g/ℓ (converted into salts K_2SiF_6 and $SrSO_4$ this would correspond to 14 and 4.15 g/ℓ respectively), the cathode cd being 50 amp/dm^2 and the temperature 55°C, permits carrying out chrome plating at a constant and, under the given conditions, maximum attainable current efficiency (∿18.5%). The brightest deposits are produced with optimal CrO_3 concentrations of 250-300 g/liter. Compared to a Cr-sulfate E, the self-regulating E has a number of advantages, namely: 1) It is less sensitive to temperature variations,

Card 1/2

SEMIN, V. M.

"Verchromung in Selbstregelndem Elektrolyt."

paper submitted for the Congress on Corrosion, Budapest, 24-30 Sept 1958.

NII, Chem. Inst. Moscow.

SEMIN, V. M. Cand Tech Sci -- (diss) "Study of the process of chromium-plating in a self-regulating electrolyte." Mos. 1958. 8 pp (Mos Order of Lenin Chemical ~~Engineering~~ Technological Inst im D. I. Mendeleyev). (KL, 13-58, 98)

MORKHOV, M.I., kand.tekhn.nauk.; KHARLAMOVA, K.N., mladshiy nauchnyy sotrudnik; SEMIN, V.M., inzh.

Galvanoplastic production of nickel linings for autoclaves. Trudy NIIKHIMMASH no.28:38-43 '59. (MIRA 15:6)
(Autoclaves) (Nickel plating)

MYTSIK, P.A., inzh.; SEMIN, V.M., kand. [illegible] nauk; STEPANENKO, V.T., inzh.; NIKOL'SKAYA, M.N., inzh.; [illegible]OVA, O.A., inzh.; PARANCHOV, V.A., inzh.; TRAKHTMOVICH, V.L.; GRUDNEV, S.M.

New developments in research. Stal' 25 no.8:855 S '65. (MIRA 18:9)

BORZUNOV, V.A.; SEMIN, V.P.

Equipment used in high-pressure research. Trudy inst. Kom. stand., mer i izm. prib. no. 46:107-116 '60. (MIRA 13:12)
(High-pressure research--Equipment and supplies)

SEMIN, V.P.

Distribution of the living space should be controlled by the working people. Gor.khoz.Mosk. 34 no.1:13-15 Ja '60.
(MIRA 13:5)

1. Nachal'nik Upravleniya ucheta i raspredeleniya zhiloy ploshchadi Mosgorispolkoma.
(Moscow--Housing)

SEMIN, V.P.

Organizational work of a district soviet. Gor.khoz.Mosk. 36 no.11:14-18 N '62. (MIRA 15:12)

1. Predsedatel' ispolnitel'nogo komiteta Zhdanovskogo rayonnogo Soveta deputatov trudyashchikhsya Moskvy.
(Moscow--Local government)

BAKHVALOVA, V.V.; SEMIN, V.P.

Unit with a standard piston manometer for pressures up to 20,000 kgf/cm^2. Trudy inst.Kom.stand.mer i izm.prib. no.75:5-8 '64. (MIRA 18:1)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut fiziko-tekhnicheskikh i radiotekhnicheskikh izmereniy.

ZOLOTYKH, Yu.V.; SEMEN, V.P.; KHOKHULYA, Yu.P.

Unit for measuring the viscosity of liquids at pressures up to 10,000 kgf/cm^2. Trudy inst.Kom.stand.mer i izm.prib. no.75(135) 122 '64. (MIRA 18:1)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut fiziko-tekhnicheskikh i radiotekhnicheskikh izmereniy.

ALEKSEYEV, K.A.; BORZUNOV, V.A.; SEMIN, V.P.; SEKOYAN, S.S.

Units and parts of high-pressure equipment. Trudy inst.Kom.stand. mer i izm.prib. no.75:151-159 '64. (MIRA 18:1)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut fiziko-tekhnicheskikh i radiotekhnicheskikh izmereniy.

[illegible], V. S.= "The problem of selecting pears." Moscow Order of Lenin Agricultural Academy imeni K. A. Timiryazev. Moscow, 1956. (Dissertations for the Degree of Candidate in Biological Sciences).

SO: Knizhnaya Letopis' No. 2., 1956

GUZUN, N.I.; SEMIN, V.S.

Heterogeneity of buds in the grapevine. Agrobiologiia no.6: 930-932 N-D '63. (MIRA 17:2)

1. Moldavskiy nauchno-issledovatel'skiy institut sadovodstva, vinogradarstva i vinodeliya.

SEMIN, V.S.; MADIS, V.I.

Dormant period in plants. Fiziol. rast. 11 no.2:287-292 Mr-Ap '64. (MIRA 17:4)

1. Laboratory of Biophysics, Institute of Horticulture, Viticulture and Wine-Making, Kishinev.

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S/123/61/000/011/029/034
A004/A101

AUTHORS: Borzunov, V. A.; Semin, V. P.

TITLE: Aggregate assembly employed in high pressure experiments

PERIODICAL: Referativnyy zhurnal, Mashinostroyeniye, no. 11, 1961, 16, abstract 11E114 ("Tr. in-tov Kom-ta standartov, mer i izmerit. priborov pri Sov. Min. SSSR", 1960, no. 46 [106], 107-116)

TEXT: The authors describe the main units of an assembly operating at high pressures (10,000 - 30,000 kgf/cm^2). In the multiplier with automatic counterpressure control, acting on the outer surface of the working chamber, the counterpressure is produced by compression in the closed space of the rubber jacket placed on the working part of the cylinder. On the outside the jacket is held by a sleeve with thick-walled rings fitted on the latter. The authors present the multiplier layout with automatic tightening of the piston seal which is effected by the pressure of the pressure fluid getting into the multiplier low-pressure zone. A special ring-shaped piston under the effect of the fluid pressure produces a tension on the padding of the seal which is proportional to the pressure in the multiplier. The authors present the grades of the materials

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utilized and the requirements as to their heat treatment and autofretting ("avto-fretirovaniye"). They analyze a manual plunger pump and a pump with electric drive by a link gear intended to produce the preliminary pressure in the working chamber of the multiplier and the working pressure in the zone of the large piston. The maximum pressure developed by the pump is 2,000 kgf/cm^2. To feed the pump, the pressure fluid is fed from a tank at a pressure of 1.5 - 2 atm which is produced by a compressor mounted on the upper pump part. The authors present the design of a valve with hydraulic seal and self-packing gland and also of a valve with hydraulic seal and stuffing-box seal with automatic tightening. They describe the device for the fixing of the thermocouple in the high-pressure chamber and the electric lead-in with four self-contained lead-outs. The electric lead-in is sealed by a cone cut into four parts, which are insulated along the cutting planes with mica. It is recommended to carry out the autofretting ("avtofretirovaniye") of short channels with rubber as transmitting media, producing a pressure with the aid of a connecting rod and a hydraulic press.

K. Perchikhin

[Abstracter's note: Complete translation]

Card 2/2

21(4) SOV/89-5-5-17/27

AUTHORS: Semin, V. S., Sal'nikov, A. I., Nesterov, V. Ye.

TITLE: A Hoist for a γ-Source With an Activity of up to 300 Gram Equivalent Ra for the Permanent Irradiation of Plants (Pod"yemnik γ-istochnika aktivnost'yu do 300 g.ekv Ra dlya dlitel'nogo oblucheniya rasteniy)

PERIODICAL: Atomnaya energiya, 1958, Vol 5, Nr 5, pp 575-576 (USSR)

ABSTRACT: The Vsesoyuznyy nauchno-issledovatel'skiy institut udobrenniy i agropochvovedeniya (VASKhNIL) (All-Union Scientific Research Institute for Fertilizers and Agricultural Science) constructed a device PAV - 300 for the storage of a Co^{60} source having an activity of up to 300 gram equivalent Ra. The preparation is at present being produced.
(In August 1958 a γ-field with a PAV - 300 device was established on the site of the Tsentral'naya opytnaya stantsiya VIUA (St. Barybino) (Central Test Station of the VIUA). The source stored corresponds to 240 gram equivalent Ra).
The device is shown in form of a drawing. A lead cylinder, the walls of which have a thickness of 220 mm, rests upon

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A Hoist for a γ-Source With an Activity of up to 300 Gram Equivalent Ra for the Permanent Irradiation of Plants

a concrete fundament which is firmly embedded in the ground. For the purpose of protecting the device from external damage and also from being damaged during transport, this block is surrounded by an iron mantle. Co^{60} is stored in a steel cylinder located at the lower end of the lead sealing block. This plug can be lifted by means of a motor-driven crane or hoist. Guiding within the lead block is provided. The highest position of the plug is fixed. If the crane should break down, the plug can nevertheless be made to enter the protective lead block by means of a device provided especially for this purpose.

The electric current for the driving mechanism and for signaling is supplied by a rectifier of the type USA-5A and by a 50-100 Ah accumulator.

Irradiation of the plants can be carried out with the following doses:

A Hoist for a γ-Source With an Activity of up to 300 Gram Equivalent Ra for the Permanent Irradiation of Plants

Distance from the source in m	Dose in r			
	in 1 h	in 24 h	in 1 month	during the period of vegetation
5	1.10^{1}	$2,4.10^{2}$	7.10^{3}	2.10^{4}
10	2	6.10^{1}	2.10^{3}	5.10^{3}
50	1.10^{-1}	2	7.10^{1}	2.10^{2}
100	2.10^{-2}	6.10^{-1}	2.10^{2}	5.10^{1}

There are 1 figure and 1 table.

SUBMITTED: March 24, 1958

Card 3/3

GEYLIKMAN, A.I.; KARNEYEV, V.F.; KOGANOV, I.A.; PETRUKHIN, S.S.; SEMIN, V.S.

Semiautomatic machine for manufacturing chains for the "Tula" sewing machines. Mashinostroitel' no.11:11-13 N '59. (MIRA 13:3)
(Machine tools) (Sewing machines)

(A) L 11005-66 EWP(e)/EWT(m)/EWP(t)/EWP(b) IJP(c) JD/JG/WH

ACC NR: AF5028735 SOURCE CODE: UR/0363/65/001/011/2025/2030

AUTHOR: Semin, Ye. G.; Dmitriyev, I. A.; Strekalovskiy, V. N.; Vykovskiy, V. S.

ORG: Ural Polytechnic Institute im. S. M. Kirov, Sverdlovsk (Ural'skiy politekhnicheskiy institut)

TITLE: Catalyzed crystallization of a beryl melt

SOURCE: AN SSSR. Izvestiya. Neorganicheskiye materialy, v. 1, no. 11, 1965, 2026-2030

TOPIC TAGS: beryllium compound, catalyzed crystallization, titanium dioxide, manganese compound, aluminum oxide, aluminum compound, silicate, x ray diffraction analysis, thermal effect, melting

ABSTRACT: The crystallization of a quenched beryl melt catalyzed with titanium and manganese dioxides was studied. X-ray diffraction analyses were carried out with the URS-50IM diffractometer. It was shown that the crystallization occurs throughout the volume of the substance. The presence of manganese promotes the formation of phenakite in the course of the melting and quenching of the melt. Manganese and titanium dioxides have different effects on the course of the crystallization, the final mineral composition, and the intermediate metastable phases formed during the thermal treatment of the quenched beryl melt. In the case of titanium dioxide, the final phases formed by the crystallization of the beryl melt are β-cristobalite, chryso-

UDC: 546.45+553.83+661.862.65+546.711:717+546.851+161.6:162.2

Card 1/2

L 11005-66

ACC NR: AP5028735

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beryl, phenakite, corundum, mullite, and γ-Al_2O_3 (low-temperature modification). In the case of manganese dioxide, the final phases are β-cristobalite, chrysoberyl, phenakite, mullite, and γ-Al_2O_3 (low-temperature modification). Orig. art. has: 2 figures.

SUB CODE: 11,07/ SUBM DATE: 23Jun65/ ORIG REF: 008/ OTH REF: 003

Beryllium
27

HW
Card 2/2

L 34108-66 EWP(e)/EWT(m) WH

ACC NR: AP6012840 (A) SOURCE CODE: UR/0080/66/039/004/0743/0748

40
B

AUTHOR: Dmitriyev, I. A.; Semin, Ye. G.

ORG: Ural Polytechnic Institute im. S. M. Kirov (Ural'skiy politekhnicheskiy institut)

TITLE: Study of the crystallization of beryllium glass

SOURCE: Zhurnal prikladnoy khimii, v. 39, no. 4, 1966, 743-748

TOPIC TAGS: crystallization, glass, beryllium compound

ABSTRACT: The formation of crystalline phases of different structure in a quenched beryl melt, which is a vitreous-crystalline material of the composition $3BeO \cdot Al_2O_3 \cdot 6SiO_2$, was studied as a function of such factors as the temperature history of the melt, the conditions of quenching, and its second heat treatment (heating for 5, 20, and 600C at 900C and 5, 20, 60, 600, and 1200C at 1400C). X-ray diffraction and microscopic analyses were used. It was found that the melt obtained consists of two distinct phases: a vitreous phase comprising 95—98% of the total mass of the substance, and a crystalline phase comprising 5—2%. In the $BeO-Al_2O_3-SiO_2$ system, the simultaneous separation of several phases is observed. Heat treatment of quenched beryl melt makes it possible to separate these phases and to change their relative proportions over a certain range. In these cases, the properties of beryl glass

Card 1/2 UDC: 546.45:161.6:162.2

L 34108-66

ACC NR: AP6012840

depend on its second heat treatment. The crystallization of vitreous beryl takes place over its entire volume. The first to separate are the highly symmetrical high-temperature modifications of the oxides entering into the composition of the melt. Phase transformations in the beryl melt take place in accordance with the step rule. The formation and separation of the binary compounds chrysoberyl and mullite occur during the second heat treatment. During the founding of beryl glass, a solid solution of BeO in SiO_2 is formed which is metastable at relatively low temperatures. Decomposition of the solid solution is observed on heating to 900C. Orig. art. has: 3 figures and 1 table.

SUB CODE: 11 / SUBM DATE: 21Dec64 / ORIG REF: 016 / OTH REF: 017

Card 2/2

MIKHAYLOVSKIY, N.K.; SEMIN, Ye.I.

Boundary between layers D_I and D_{II} in the Tuymazy field. Trudy VNII no.20:36-45 '59. (MIRA 12:10)
(Tuymazy region (Bashkiria)--Petroleum geology))

VOINOV, V.V.; SEMIN, Ye.I.

Method for making structural maps and determining oil boundaries in a dissected layer. Trudy VNII no.20:117-124 '59. (MIRA 12:10)

(Petroleum geology)

SEMIN, Ye. I., Cand Geol-Min Sci -- (diss) "Study of geological non-uniformity in the productive layers of the Upper Devonian in eastern Tataria and western Bashkiria, applicable to the problem of rational development of petroleum beds." Moscow, 1960. 15 pp; (Gosplan USSR, All-Union Petroleum Gas Scientific Research Inst -- VNII); 170 copies; price not given; (KL, 23-60, 122)

SMIN, Ye.I.

Studying the relationship between the porosity and permeability of rocks in the horizons D_1 in the Romashkino and Tuymazy oil fields. Trudy VNII no.30:18-35 '60. (MIA 14:8)

(Romashkino region--Rocks--Permeability)
(Tuymazy region--Rocks--Permeability)

IVLEV, L.L.; SMIR, M.I.

Calculating the necessary number of wells in order to determine the average parameters of layers with a given precision. Trudy VNII no.30: 76-85 '60. (MIRA 14:2)

(Oil reservoir engineering)

VOINOV, V.V.; LEYBIN, E.L.; SEMIN, Ye.I.; KHRUSTALEVA, Z.A.

Studying the geological uniformity of producing layers.
Nauch.-tekh.sbor. po dob. nefti. no. 14:3-7 '61.
(MIRA 17:6)

SEMIN, Ye.I.

Geological nonuniformity of oil-bearing strata and some ways of studying it. Trudy VNII no.34:3-43 '62. (MIRA 15:7)
(Tatar A.S.S.R.—Oil reservoir engineering)
(Bashkiria—Oil reservoir engineering)

SEMIN, Ye.I.

Taking into consideration the nonuniformity of beds with respect to permeability when planning the development of oil pools. Trudy VNII no.42:322-339 '65. (MIRA 18:5)

RABUKHIN, A.Ye.; MEDVEDEVA, A.S.; SEMINA, A.M.

Influenza and pulmonary tuberculosis. Probl.tub. 38 no.1: 12-19 '60. (MIRA 13:10)

(TUBERCULOSIS) (INFLUENZA)

RABUKHIN, A.Ye.; KLYUCHAREVA, Ye.A.; KULAKOVA, A.A.; LAMBINA, A.G.; MEDVEDEVA, A.S.; NEFEDOV, A.F.; RODIONOVA, T.V.; SAFAROV, R.S.; SEMINA, A.M.; YAKOVLEVA, T.A.

Clinical and epidemiological characteristics of tuberculosis in elderly persons. Trudy TSIU 63:14-19 '63. (MIRA 17:9)

1. Kafedra tuberkuleza TSentral'nogo instituta usovershenstvovaniya vrachey.

SEMINA, G.I.

USSR/ Biology - Hydrobiology

Card 1/1 Pub. 22 - 47/54

Authors : Zhuze, A. P., and Semina, G. I.

Title : General laws governing the distributinn of diatoms in the Bering Sea plankton and in the surface bottom sedimentations

Periodical : Dok. AN SSSR 100/3, 579-582, Jan 21, 1955

Abstract : Hydrobiological data are given regarding the laws governing the distribution of diatoms (seaweeds) among the plankton of the Bering Sea and in surface bottom deposits of that sea. Five references: 4 USSR and 1 USA (1937-1954).

Institution : Academy of Sciences USSR, Institute of Oceanology

Presented by: Academician N. M. Strakhov, November 9, 1954

SEMINA, G.I.

USSR/ Biology - Hydrobiology

Card 1/1 Pub. 22 - 44/51

Authors : Semina, G. I.

Title : About two zonal phytoplankton groupings (example of the Bering Sea)

Periodical : Dok. AN SSSR 101/2, 363-366, Mar 11, 1955

Abstract : Biological data are presented regarding the neritic and the oceanic phytoplankton zone of the Bering Sea. The phytoplankton biomass of both zones is described. Five references: 3 USSR, 1 USA and 1 French (1935-1955). Map.

Institution : Acad. of Sc., USSR, Inst. of Oceanology

Presented by: Academician E. N. Pavlovskiy, November 15, 1954

SEMINA, G. I.

USSR/Biology - Hydrobiology

Card 1/1 Pub. 22 - 44/51

Authors : Semina, G. I.

Title : About the vertical distribution of the phytoplankton in the Bering Sea

Periodical : Dok. AN SSSR 101/5, 947-949, Apr 11, 1955

Abstract : Hydrobiological data are presented on the phytoplankton of the Bering Sea. The data were gathered by a special hydrobiological expedition cruising along the western part of the Bering Sea, Pacific Ocean and Kamchatka Island shores. Four references: 1 USSR, 2 English and 1 Swedish (1928-1955). Tables; graphs.

Institution : Acad. of Sc., USSR, Institute of Oceanology

Presented by : Academician Ye. N. Pavlovskiy, November 15, 1954

SEMINA, G.I.

New species of the genus Denticula Ktz. Bot.mat.Otd.spor.rast. 11:82-84 Ja. '56. (MLRA 9:11)
(Bering Sea--Diatoms)

SEMINA, G.I.

Seasonal changes of phytoplankton in the western part of the Bering Sea. Bot.mat.Otd.spor.rast. 11:84-98 Ja '56.(MLRA 9:11)
(Bering Sea--Phytoplankton)

ZHUZE, A.P.; SEMINA, G.I.; SMIRNOVA, L.I.

"Diatoms in the plankton of the Black Sea" by A.I. Proshkina-Lavrenko. Reviewed by A.P.Zhuze, G.I.Semina, L.I.Smirnova. Bot. zhur.41 no.8:1225-1227 Ag '56. (MLRA 9:12)

1. Institut okeanologii Akademii nauk SSSR, Moskva.
(Black Sea--Diatoms) (Proshkina-Lavrenko, A.I.)

BEKLEMISHEV, K.V.; SEMINA, G.I.

Structure of the biogeographical boundary between the boreal and tropical pelagic regions of the northwestern part of the Pacific Ocean. Dokl. AN SSSR 108 no.6:1057-1060 Je '56. (MIRA 9:10)

1. Institut okeanologii Akademii nauk SSSR. Predstavleno akademikom A.A. Grigor'yevym.
(Pacific Ocean--Marine biology)

SEMINA, G.I.

Composition and distribution of phytoplankton in the northwestern part of the Pacific during the spring and autumn of 1955. Dokl. AN SSSR 110 no.3:465-468 S '56.
(MLRA 9:12)

1. Predstavleno akademikom A.A. Grigor'yevym.
(Pacific Ocean--Phytoplankton)

SEMINA, G.I.

Factors influencing vertical distribution of phytoplankton in the sea. Trudy Gidrobiol. ob-va 8:119-129 '57. (MIRA 11:3)

1. Institut okeanologii AN SSSR.
(Phytoplankton) (Marine flora)

SEMINA, G.I.

Connection between the phytogeographic areas in the pelagic zone of the northwestern part of the Pacific Ocean and the distribution of water masses in this region. Trudy Inst. okean. 27:66-76 '58.
(Pacific Ocean) (MIRA 11:4)

AUTHOR: Semina, G. I. 20-118-6-41/43

TITLE: Typification of Various Sections of the Neritic Zone of the Boreal Region of the Pacific Ocean
(Tipizatsiya razlichnykh uchastkov neriticheskoy zony boreal'noy oblasti Tikhogo okeana)

PERIODICAL: Doklady Akademii Nauk SSSR, 1958, Vol. 118, Nr 6, pp. 1194-1196 (USSR).

ABSTRACT: Since the catch of pelagic fish in the open ocean has increased steadily within the last years, the typification of individual parts of the ocean according to their biological productivity, becomes necessary. The neritic zone in the afore-mentioned region should be characterized from these points of view according to the quantity of plankton, since the production of all other members of the alimentary chain depends on the plankton. The expeditionary vessel "Vityaz" collected approximately 4000 specimens of phyto-plankton in the aforesaid region. The author separated in a previous work the following 2 zones according to the quantity and the annual cycle of development of the phyto-plankton (reference 4).
A) A marine zone in which more than 50% of the species are ne-

Card 1/4

an early rupture of the salt-content in spring. "Flowering" (the becoming green) lasts here throughout the whole vegetation-period. There is only 1 spring-temperature maximum of the number of phytoplankton. Diatomaceous algae prevail. The biomass attains hundreds of grams per $1m^2$ in spring. The Anadyrskiy-bay (Bering Sea) and the Shelikhova-bay (Okhotskoye Sea) belong to this. II. Type - Kamchatskiy (figures I, Ib). Open bays, the littoral zones of the continents, peninsulas and islands with greater depths and little inflow from the rivers. A closed layer of ice lacks as a rule. There are 2 phytoplankton-maxima: in spring and in autumn. Diatoms prevail in spring, whereas peridinae constitute a substantial part (30%) in autumn. The becoming green of the water is extended in spring, whereas in autumn it is limited to some places near the shore. The Kamchatka-region in the Pacific belongs to the latter, as well as the Olyutorskiy-bay in the Bering Sea, waters round Alaska, the Aleutian Islands and the Komandorskiye Islands. Concluding, a comparison with the results obtained by H. H. Gran (reference 2) for the Norvegian fjords, is given.

SEMINA, G. I.

"The Effect of Vertical Circulation on the Sea Phytoplankton". report to be submitted for the Intl. Oceanographic Cong. New York City, 31 Aug - 11 Sep 1959.

(Inst. of Oceanology, Moscow)

SEMINA, G.I.; ZHUZE, A.P.

Diatoms in biocoenoses and thanatocoenoses of the western part of the Bering Sea. Trudy Inst.okean. 30:52-67 '59. (MIRA 13:5)

(Bering Sea--Diatoms)

SEMINA, G.I.

Distribution of phytoplakton in Kronotskiy Gulf. Trudy Inst. okean. 36:73-91 '59. (MIRA 15:4)
(Kronotskiy Gulf--Phytoplakton)

3(9) SOV/20-124-6-35/55

AUTHOR: Semina, G. I.

TITLE: The Distribution of the Planktonic Diatom Ethmodiscus rex (Wall) Hendey Among the Plankton (Raspredeleniye diatomovoy vodorosli Ethmodiscus rex (Wall) Hendey v planktone)

PERIODICAL: Doklady Akademii nauk SSSR, 1959, Vol 124, Nr 6, pp 1309-1312 (USSR)

ABSTRACT: Large accumulations of the planktonic diatom Ethmodiscus rex are often observed in the uppermost layers of sediments in the tropical zone of the oceans. They have been found in limited areas of the Atlantic, Pacific, and Indian Oceans. Their origin still leads to differences of opinion among geologists (Refs 1, 2, 6-9, 11). The data concerning the distribution of the diatoms themselves among the plankton are very meagre (Refs 3-5, 10). Attempts were made to find E. rex in areas of shell accumulation in the plankton, however, without success (Refs 8, 11). There is only a single case known of the occurrence of numerous E. rex among the plankton, in the Bay of Bengal (Ref 3). Although E. rex occurs in very small numbers in the plankton, this species is not as rare as one is inclined to believe.

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The Distribution of the Planktonic Diatom Ethmodiscus rex (Wall) Hendey Among the Plankton

The latter impression originates in a consequence of the methods of collection, which deal with a relatively small amount of water. The author has been able to demonstrate in the Pacific (Expedition ship "Vityaz'" 1955-1958) that the numerical registration of such rare species (with a considerable cell size, such as E. rex) is possible only with nets which filter large quantities of water. I. A. Tarkhova worked on part of the material. The reports of K. V. Beklemishev (Report of the 2nd Maritime Antarctic Expedition)(otchet II Morskoy Antarkticheskoy ekspeditsii)) were drawn upon for the characteristics of the Indian Ocean. The plankton were caught with Dzhedi nets having 80 (most convenient) and 37 cm hole opening diameters, mill gauze Nr 38. From the distribution of E. rex it appears that it is an oceanic, tropical species (Fig 1). E. rex occurred rather often in the author's material (in 111 stations of 150 sampled). However, the numbers found are very small. Figures 2 and 3 show the vertical distribution of E. rex in 2 cross sections. Through her results the author has refuted the assertion (Ref 3) that planktologists usually do not collect in the layers in

The Distribution of the Planktonic Diatom Ethmodiscus rex (Wall)Hendey Among the Plankton

which the major accumulations of E. rex occur. Its numerical maximum is found between 0 and 50 m deep. Although the number of E. rex in the plankton is inferior to the total number of all other diatoms, the total surface area of its shell often exceeds the total surface areas of the shells of these smaller forms. The author assumes that E. rex enlarges itself explosively on limited surfaces. This lasts only a short time and does not occur every year. However, this must first be confirmed. The local appearance of Ethmodiscus muds is possibly connected with abiotic processes (submarine currents, suspension currents, small depressions on the bottom, etc Refs 1, 3, 8). There are 3 figures and 11 references, 1 of which is Soviet.

ASSOCIATION: Institut okeanologii Akademii nauk SSSR (Institute of Oceanography of the Academy of Sciences, USSR)

PRESENTED: October 6, 1958, by N. M. Strakhov, Academician

SUBMITTED: October 2, 1958

SEMINA, G.I.

Qualitative composition of phytoplankton in the Bering Sea. Bot. mat. Otd. spor. rast. 13:35-43 '60. (MIRA 13:7)
(Bering Sea--Algae)

SEMINA, G. I.

Distribution of phytoplankton in the central Pacific. Trudy Inst. okean. 41:17-30 '60. (MIRA 13:9)
(Pacific Ocean--Phytoplankton)

SEMINA, G. I.

Papers submitted for the 10th Pacific Science Congress, Honolulu, Hawaii 21 Aug-6 Sep 1961.

MAGIBINA, M. S., Institute of Geology - "Mesozoic depressions and troughs of east Asiatic type and their position in the systematics of tectonic forms" (Section VII.C)

BELEPO, B. A., Moscow State University, Physical Faculty - "The gamma-ray spectrometric measurements of artificial radioactivity in upper layers of the ocean" (Section VII.B.6)

NESTEROV, V. G., Chair of Forestry, The Agricultural Academy imeni K. A. Timiryazev - "Forest fire research and methods of fire control" (Section V.B)

OSTROUMOVA, T. A., Institute of Oceanology - "Biogeographical and morphological analysis of reproduction and development of flatfish in the seas of the northwest Pacific" (Section III.C)

OZMIDOV, R. V., Institute of Oceanology - "Investigation of the horizontal turbulent exchange in the Pacific Ocean" (Section VII.B)

PARIN, N. V., Institute of Oceanology - "Regularities in the geographical distribution of flying fishes in the Pacific Ocean" (Section VII.C)

PERGAMENT, M. A., Institute of Geology - "Stratigraphic horizons in the cretaceous deposits of Kamchatka" (Section VII.C)

PETELIN, V. P., Institute of Oceanology - "The processes of recent sedimentation in the western part of the equatorial zone in the Pacific" (Section VII.C.1)

PETRUSHEVSKIY, B. A., Institute of Earth Physics imeni O. Yu. Schmidt - "The seismic geological conditions in the northwestern outlying area of the Pacific basin" (Section VII.C.2)

PONOMAREVA, L. A., Institute of Oceanology - "Euphausiidae in the northern part of the Pacific" (Section III.C)

PORTENKO, L. A., Institute of Zoology - "The problem of the Bering land bridge from the zoological point of view" (Section III.A.8.a)

POSHCHARSKIY, Yu. M., Institute of Geology - "Some specific features in the tectonics of the north part of the Pacific belt" (Section VII.C)

PYRKIN, Yu. P., Moscow State University, Physical Faculty - "A new deep-sea device for recording currents ('MGU')" (Section VII.B.5)

RADKEVICH, Ye. A., Institute of Geology - "On the stability and inheritance of structural elements in the frame of the Pacific Ocean depression" (Section VII.C)

RASS, T. S., OSTROUMOVA, T. A., and GORBUNOVA, N. N., Institute of Oceanology - "Geographical regularities in regard to reproduction and development of mass fishes in the northern part of the Pacific" (Section III.C)

ROMANKEVICH, Ye. A., Institute of Oceanology - "Organic substance in bottom sediments in the western part of the Pacific" (Section VII.C.1)

RUDICH, Ye. M., Institute of Earth Physics imeni O. Yu. Schmidt - "Relations between deep focus earthquakes in the eastern margin of Asia and large structures of the earth crust" (Section VII.C.2)

RYABCHIKOV, A. M., Moscow State University, Geographical Faculty - "The structure of natural zonatic in east Asia" (Section VI.C)

RYKUNOV, L. N., Moscow State University, Physical Faculty, Chair of Hard Crust - "The correlative method for studying microseism" (Section VII.C.2)

SAIDOVA, Kh. M., Institute of Oceanology - "The distribution of bottom lime Foraminifera in the northern part of the Pacific and its use for the reshaping of the paleorelief" (Section VII.C.1)

SAMOYLENKO, V. S., Institute of Oceanology - "Problems concerned with the theory of formation of the temperature regime in seas and oceans" (Section VII.A)

SEMINA, G. I., Institute of Oceanology - "Biogeographical zonation of the Pacific Ocean in regard to phytoplankton" (Section III.A)

SEROVA, M. Ya., Institute of Geology - "Paleogene Formanifera of Kamchatka" (Section VII.C)

SAVILOV, A. I. SAVILOV, A. I., Institute of Oceanology - "Velella and Physalia in the pleiston of the Pacific" (Section III.C)

[illegible], Institute of Earth Physics imeni O. Yu. Schmidt - "Mechanism of ocean-magmas (?) origin" (Section VII.C.2)

SHOSHIN, A. A., The Central Organization of Leningrad - "The main problems of human illness geography and their significance for prophylactic medicine" (Section VII.B.4)

SHUMSKIY, P. A., Institute of Permafrost Studies - "Glaciology of Antarctica" (Section VII.D.1)

SYSOYEV, N. N., Institute of Oceanology - "Methods for measuring deep currents in the ocean and some results of their application in the Pacific Ocean" (Section VII.B.5)

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001547920001-2"

SEMINA, G.I.

Botanical reports at the First International Oceanographic Congress in New York. Bot. zhur. 45 no.11:1712-1718 N '60. (MIRA 13:11)

1. Institut okeanologii Akademii nauk SSSR, Moskva.
(Marine flora--Congresses)

SEMINA, G.I.

Phytoplankton in the mixing zone between waters of the Oyashio and the Kuroshio in the spring of 1955. Trudy Inst.okean. 51:3-15 '61. (MIRA 14:6)

(Pacific Ocean--Phytoplankton)

SEMINA, G.I.

A new species of plankton diatoms of the genus Chaetoceros Ehr. from the central part of the Pacific Ocean. Trudy Inst.okean, 51: 31-32 '61. (MIRA 14:6)

(Pacific Ocean—Diatoms)

BEKLEMISHEV, K.V.; PETRIKOVA, M.N.; SEMINA, G.I.

Cause of the buoyancy of plankton diatoms. Trudy Inst.okean. 51:33-36 '61. (MIRA 14:6)
(Diatoms) (Sap)

BEKLEMISHEV, K.V.; SEMINA, G.I.

Comparison of ecologic and biogeographic methods of describing the pelagic zones of the oceans. Vop. ekol. 4:86-88 '62. (MIRA 15:11)

1. Institut okeanologii AN SSSR, Moskva.
(Marine ecology)

SEMINA, G.I.

Phytoplankton in the central part of the Pacific Ocean along the meridian 174° W. Part 1; Methods of collection and processing. Trudy Inst. okean. 58:3-26 '62. (MIRA 15:12)

(Pacific Ocean—Phytoplankton)

SEMINA, G.I.

Phytoplankton along the 174° W longitudinal section in the central part of the Pacific Ocean. Part 2: Amount of phytoplankton cells. Trudy Inst. okean. 71:5-21 '63. (MIRA 16:11)

KONTOROVICH, L.M.; LOGANSEN, A.V.; LEVCHENKO, G.T.; SEMINA, G.N.; BOBROVA, V.P.; STEPANOVA, V.A.

Chromatographic analysis of acetylenic hydrocarbons. Zav.lab. 28 no.2:146-148 '62. (MIRA 15:3)

1. Gosudarstvennyy nauchno-issledovatel'skiy i proyektnyy institut azotnoy promyshlennosti i produktov organicheskogo sinteza.
(Hydrocarbons) (Chromatographic analysis)

IOGANSEN, A.V., ZHILENKOVA, L.G., SEMINA, G.N., Primenil uchastiye
ARUTYUNYA, N.P., [illegible]

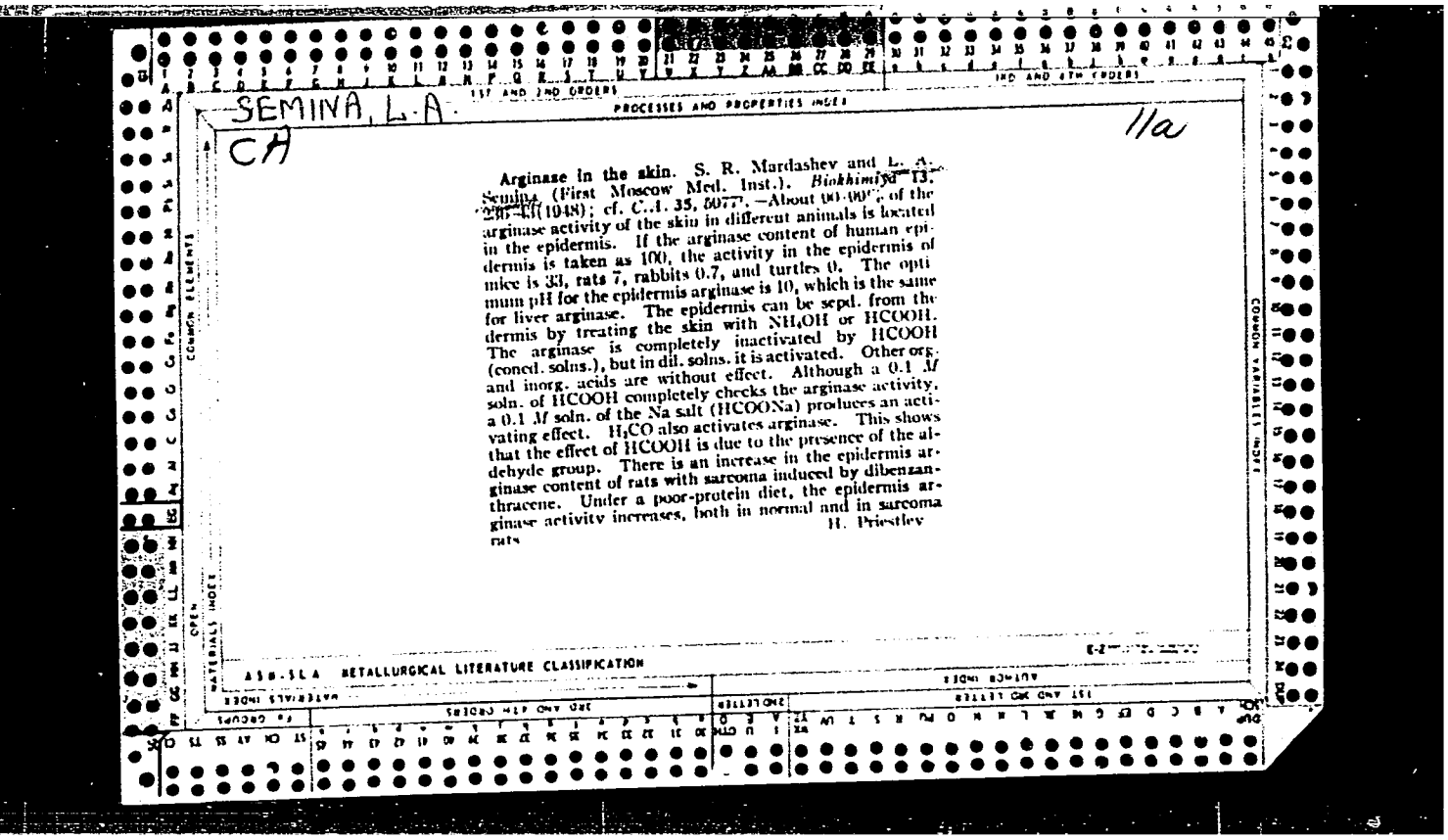
Composition of the products of the oxidation of cyclohexane.
Khim. prom. 42 no.5:360-364 My '66. (MIRA 18:9)

ZELENSKAYA, L.G.; MAMEDOV, F.A.; SEMINA, G.N.

Infrared absorption spectra of monochlorosubstituted alkylcyclohexanes. Azerb. khim. zhur. no.3:103-110 '64. (MIRA 18:5)

LASTOCHKIN, Viktor Sergeyevich; SEMINA, F.V., red.; PECHERSKAYA, T.I., tekhn. red.

[Providing for winter earthwork with cohesive soil by artificial salinization]Obespechenie proizvodstva zemlianykh rabot so sviaz-nymi gruntami i zimnee vremia putem iskusstvennogo ikh zasoleniia. Irkutsk, Irkutskoe knizhnoe izd-vo, 1962. 62 p. (MIRA 16:4)
(Salt) (Earthwork)



SEMINA, L.A.

CA

11a

PROCESSES AND PROPERTIES INDEX

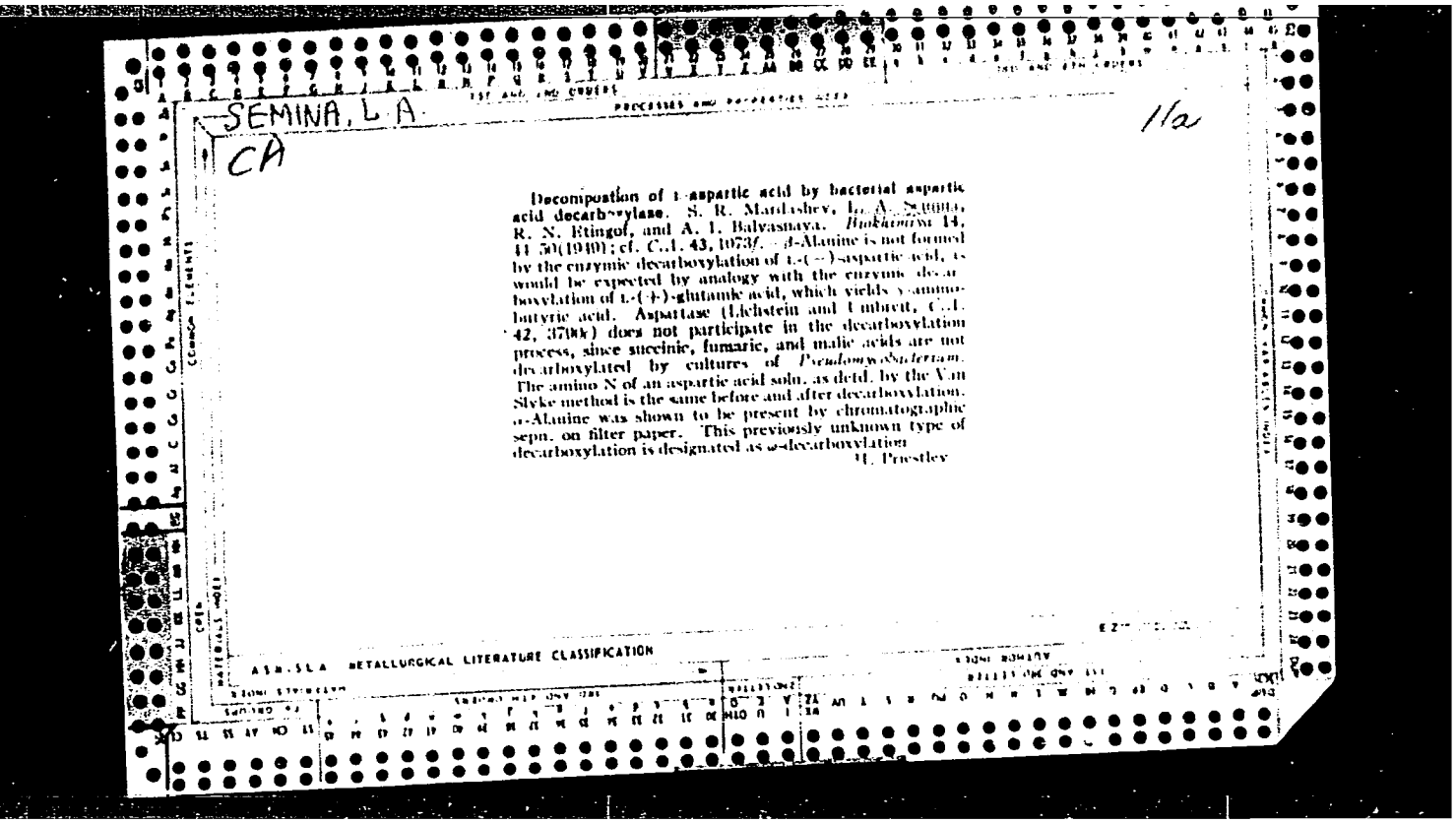
1ST AND 2ND ORDERS

3RD AND 4TH ORDERS

COMMON ELEMENTS

Arginase in the skin. S. R. Mardashev and L. A. Semina (First Moscow Med. Inst.). *Biokhimiya* 13, 280–4 (1948); cf. *C.A.* 35, 5077.—About 90–99% of the arginase activity of the skin in different animals is located in the epidermis. If the arginase content of human epidermis is taken as 100, the activity in the epidermis of mice is 33, rats 7, rabbits 0.7, and turtles 0. The optimum pH for the epidermis arginase is 10, which is the same for liver arginase. The epidermis can be sepd. from the dermis by treating the skin with NH_4OH or HCOOH. The arginase is completely inactivated by HCOOH (concd. solns.), but in dil. solns. it is activated. Other org. and inorg. acids are without effect. Although a 0.1 *M* soln. of HCOOH completely checks the arginase activity, a 0.1 *M* soln. of the Na salt (HCOONa) produces an activating effect. H_2CO also activates arginase. This shows that the effect of HCOOH is due to the presence of the aldehyde group. There is an increase in the epidermis arginase content of rats with sarcoma induced by dibenzanthracene. Under a poor-protein diet, the epidermis arginase activity increases, both in normal and in sarcoma rats. H. Priestley

A58-5LA METALLURGICAL LITERATURE CLASSIFICATION



SEMINA, L A.

CA

11a

Decomposition of L-aspartic acid by bacterial aspartic acid decarboxylase. S. R. Mardashev, L. A. Semina, R. N. Rtingof, and A. I. Balyasnaya. *Biokhimiya* 14, 41-50(1949); cf. *C.A.* 43, 1073*f*. β-Alanine is not formed by the enzymic decarboxylation of L-(−)-aspartic acid, as would be expected by analogy with the enzymic decarboxylation of L-(+)-glutamic acid, which yields γ-aminobutyric acid. Aspartase (Lichstein and Umbreit, *C.A.* 42, 3780*h*) does not participate in the decarboxylation process, since succinic, fumaric, and malic acids are not decarboxylated by cultures of *Pseudomonas lactarium*. The amino N of an aspartic acid soln. as detd. by the Van Slyke method is the same before and after decarboxylation. β-Alanine was shown to be present by chromatographic sepn. on filter paper. This previously unknown type of decarboxylation is designated as α-decarboxylation.

H. Priestley

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

SEMINA, L.A.

CA

11 A

Preparative isolation of crystalline asparagine from liver. S. R. Mardashev and L. A. Semina. *Doklady Akad Nauk S.S.S.R.* 73, 351–4(1950).—Cattle liver (3 kg.) macerated in H_2O at room temp., freed of protein by 20% Cl_3CCO_2H, filtered (total vol. 8 l.), extd. with Et_2O to remove the reagent from aq. filtrate, concd. *in vacuo* at 40°, centrifuged, cooled to 0° and acidified with 5% H_2SO_4, followed by phosphotungstic acid in 5% H_2SO_4, centrifuged, freed of phosphotungstate ion excess by $Ba(OH)_2$, freed of Ba by H_2SO_4, concd. at 40° to 400 ml., made alk. with $Ba(OH)_2$ and dild. with 3 vols. 90% EtOH to remove free dicarboxylic amino acids, retreated with H_2SO_4, concd. to 300 ml. and slowly ppted. by 25% Hg(OAc)$_2$, gave a ppt. (isolated in 2 fractions) which, treated with H_2S, neutralized with NH_3 and concd. at 40°, gave some tyrosine (removed by filtration); continued cooling yielded some leucine, and the final concentrate brought down to 3 ml. and treated with 4 ml. 96% EtOH and chilled, yielded after 24 hrs. a dense mass of asparagine in 7 mg. yield; the identity was checked by microscopic examn. and chromatography; analysis indicated the monohydrate, m. 228–30°. The results confirm the presence of asparagine in living matter.

G. M. Kosolapoff

CA

11A

Enzymic synthesis of glycine from glyoxalic acid. S. R. Mardashev and L. A. Semina. *Doklady Akad. Nauk S.S.S.R.* 74, 537–40(1950).—Incubation of rat-liver specimens 1 hr. at 30° in O_2 or N_2 with solns. of glyoxalic acid with addn. of either asparagine, aspartic acid, NH_4Cl, glutamine, or glutamic acid in phosphate buffers (pH 6 or 8), followed by partition chromatography of the products showed the synthesis of glycine from glyoxalic acid, which proceeds at pH 6 or 8 both in aerobic and anaerobic conditions. Since addn. of NH_4 salts does not increase the rate, the reaction is not simply a reversed deamination of glycine. The order of effectiveness in the synthesis is given by the ascending series: aspartic acid, glutamic acid, asparagine, glutamine. Direct transamination is a possible course, and possibly 2 enzymes participate, causing condensation of the amido group with carbonyl of glyoxalic acid, followed by reduction and hydrolysis into glycine and aminodicarboxylic acid.

G. M. Kosolapoff

GLADKOVA, V.N.; MARDASHEV, S.R.; SEMINA, L.A.

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