AMSTISLAVSKIY, A.Z.

Observations on the ecology of the whitefish Coregonus peled (Gmelin) in the Shuryshkary Bayou (basin of the lower Ob'River). Trudy Sal. stats. UFAN SSSR no.1:81-100 '59. (MIRA 14:9)
(Shuryshkarskiy District--Whitefishes)

S/100/60/000/003/003/003
A053/A026

AUTHORS: Amstislavskiy, A.Z.; Brovkin, A.A.; Roshchin, K.A.; Engineers

TITLE: Crane for Building Ramps and Bridges

PERIODICAL: Mekhanizatsiya Stroitel'stva, 1960, No. 3, pp. 17 - 19

TEXT: The article describes the original design of a special crane for the assembly of large ramps, bridges, etc, by army engineer method, with the crane using the assembled structure as basis for moving forward and continuing assembly work in front. On the occasion of the building of the Bratskaya Ges (Bratsk Hydroelectric Power Plant) a group of specialists of Gidrostal'proyekt proposed a special 80/30 ton crane, (Patent No. 121924) in which the turning boom is replaced by an extended gantry which, mounted at a certain angle, projects out sufficiently far to operate the hoisting mechanism, which consists of a rigid suspension arm over which is fixed a suspension bracket with a triple hoisting tackle, suspended by means of two side-pulley blocks to the upper cross bar of the inclined gantry. By simultaneous change in length of the side-pulley blocks the transversal movement of the suspension bracket and, consequently, of the suspended load is brought about. The carraying part of the body of the crane is made up by 2 girders of a

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30 m span, 7.6 m high, joined at the top by cross bars and diagonal ties. The cross section of the body represents a gantry with a span of 18.72 m and 10.17 m high, which permits 4 RR tracks to pass underneath. The stands of the body are mounted on wheels, by which the crane moves. On top the stands are joined by cross bars, thus forming solid frames. The gantry of the main lift (80 ton capacity) consists of an inclined frame, 19.62 m high and 18.72 m wide, hinged at the lower end to the cantilever fixed at the end of the body and held at the top by 2 chain ties. The angle of incline of the main lift gantry is 30° which brings the point of suspension to a distance of 27 m from the axis of the front bogies. The gantry of the auxiliary lift (30 ton capacity) constitutes a similar frame 26.05 m high with 2 tie beams and a cross bar at the top. The angle of incline of this gantry is 36° which places the point of suspension at a distance of 49 m. The mechanism of the main lift and of the transversal movement of load consists of 3 pulley blocks of 13 threads and 80-ton hoisting capacity each. Two blocks serve for the transversal movement and one for the load lift. In order to synchronize the work of the side-pulley blocks, the threads are running over one drum divided in two parts, driven by one 8.5-ton capstan. The mechanism of the auxiliary lift is of the same design as that of the main lift with the only difference that the thread of the load lifting block passes through two 5-ton capstans, in order to increase

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the speed for covering greater distance. The counterweight (220 tons) consists of 8 reinforced concrete slabs 750 x 750 mm and 20 m long. The moving mechanism of the crane consists of 4 twin-wheel bogies equipped with electric driving gear, the track is 18.7 m wide. One of the great advantages of this crane consists in the transversal movement of the load which takes place on a vertical plane all the way, perpendicularly to the longitudinal axis of the ramp under construction. The described crane, which has been produced by the Dneprovskiy mekhanicheskiy zavod (Dneprovsk Mechanical Plant) in Zaporozh'ye is used in the construction of a concrete delivering ramp of the Bratsk Hydroelectrical Power Plant having sectional spans of 44 m and using structural elements weighing up to 80 tons. The technical characteristics of the crane are given as follows: Lifting capacity of main lift at a distance of 27 m - 80 tons; lifting capacity of auxiliary lift at 49 m distance - 30 tons; maximum height of lift of main suspension bracket - 6 m above rail level; maximum depth of descent of main suspension bracket - 15 m below rail level; lifting of suspension bracket 1 m/min; speed of transversal movement of main suspension bracket - 1.5 m/min; The same data for the auxiliary suspension bracket are: maximum lift over rail level - 15 m; maximum depth of descent - 80 m; speed of lift 7m/min; speed of transversal movement - 5.5 m/min. Speed of crane movement 9.15 m/min; full weight of crane 571 tons. There are 1

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figure, 2 photographs and 1 table.

Figure 1: System of special crane

a) hoisting tackles of auxiliary lift b) hoisting tackles of main lift 1) side pulley blocks, 2) suspension arm, 3) suspension bracket with triple hoisting tackle. c) cross section of body

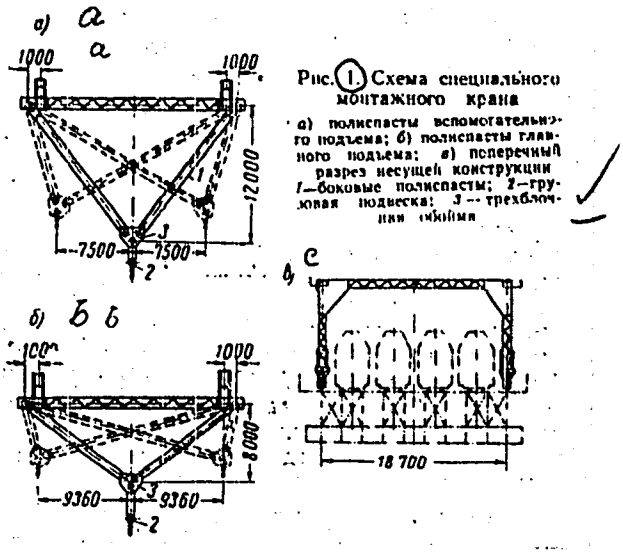

Рис. 1. Схема специального монтажного крана

а) полиспасты вспомогательного подъема; б) полиспасты главного подъема; в) поперечный разрез несущей конструкции 1—боковые полиспасты; 2—грузовая подвеска; 3—трехблочная обойма

Card 4/4

AMSTISLAVSKIY, D.M., inzhener

Automatic regulation of the air inflow in coke oven heating. Stal' 15 no.6:483-487 Je '55. (MLRA 8:8)

1. Zhdanovskiy koksokhimicheskiy zavod. (Coke ovens)

AUTHOR: Amstislavskiy, D.M. and Kalugin, V.A. (Zhdanov Coke Oven Works). 140

TITLE: Operation of recording amperometers on coke ovens. (Rabota regestriruyshchikh amperometrov na koksovykh pechakh.)

PERIODICAL: "Koks i Khimiya" (Coke and Chemistry), 1957, No. 2, pp. 30 - 33, (U.S.S.R.)

ABSTRACT: The use of recording amperometers on pushing machines can be used as an indicator of the pushing operation. This may be particularly valuable for batteries with worn refractories. The diagram of an installation used in the Zhdanov Works (Fig. 1) and examples of records obtained under different pushing conditions (Figs. 2 - 9) are given.

Experimental Automation of Measuring Temperatures in the Control Heating Flues of Coke Ovens.

(higher than the first minimum) and rises again to a maximum before the oven is pushed (Fig.6,1- descending stream, 2 - ascending stream). The results obtained indicated that an automatic measuring of temperatures in the control flues is possible. There are 4 tables and 6 figures.

ASSOCIATION: Zhdanov: Coke Oven Works (Zhdanovskiy koksokhimicheskiy zavod)

AVAILABLE: Library of Congress

Card 2/2

SOV/68-59-8-12/32

AUTHOR: Amstislavskiy, D.M.

TITLE: Methods of Carrying out Work in Which There is a Danger of Explosion on Coke Oven Plants (Proizvodstvo nekotorykh gazoopasnykh rabot v koksovykh tsekhakh)

PERIODICAL: Koks i khimiya, 1959, Nr 8, pp 26-30 (USSR)

ABSTRACT: Safety precautions which should be taken before carrying out some repairs during which there is a danger of explosion are outlined. The execution of the following work is considered: 1) joining of a new gas main to another already in operation and 2) repairs of the operating gas mains. There are 5 figures.

ASSOCIATION: Zhdanovskiy koksokhimicheskiy zavod (Zhdanov Coking Works)

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AMSTISLAVSKIY, D.M.; CHAYKA, I.I.

Selecting the places for taking samples of combustion products.
Koks i khim. no.9:21-24 '60. (MIRA 13:9)

1. Zhdanovskiy koksokhimicheskiy zavod.
(Coke ovens)

VOLOSHIN, A.I.; BOGOYAVLENSKIY, K.A.; AKHTYRCHENKO, A.M.; TURIK, I.A.; ZHIDKO, A.S.; LYALYUK, V.S.; GABAY, L.I.; ONOPRIYENKO, V.P.; STARSHINOV, B.N.; BABIY, A.A.; SAVELOV, N.I.; Prinimali uchastiye: TORYANIK, E.I.; VASIL'YEV, Yu.S.; SHEMEL', T.I.; SENYUTA, V.I.; BONDARENKO, I.P.; AMSTISLAVSKIY, D.M.; ANDRIANOV, Ye.G.; SERGEYEV, G.N.; ZAMAKHOVSKIY, M.A.; LYUKIMSON, M.O.; IVONIN, V.K.; TSIMBAL, G.I.; SEN'KO, G.Ye.; KONAREVA, N.V.; SOLODKIY, Yu.L.; LUKASHOV, G.G.; TARASOV, D.A.; GORBANEV, Ya.S.; SUPRUN, I.Ye.; TIKHOMIROV, Ye.I.; KONONENKO, P.A.; PROKOPOV, V.N.; GULYGA, D.V.; PLISKANOVSKIY, S.T.; PONOMAREVA, K.Ye.

Effect of the length of coking on coke quality and the performance of blast furnaces. Koks i khim. no.12:26-32 '61.
(MIRA 15:2)

1. Ukrainskiy uglekhimicheskiy institut (for Voloshin, Bogoyavlenskiy, Akhtyrchenko, Turik, Zhidko, Lyalyuk, Toryanik, Vasil'yev, Shemel'). 2. Zhdanovskiy koksokhimicheskiy zavod (for Gabay, Senyuta, Bondarenko, Amstislavskiy, Andrianov, Sergeyev, Zamakhovskiy, Lyukimson, Ivonin, TSimbal). 3. Ural'skiy nauchno-issledovatel'skiy institut chernykh metallov (for Onopriyenko, Starshinov, Babiy, Sen'ko, Konareva, Solodkiy). 4. Zavod "Azovstal'" (for Savelov, Lukashov, Tarasov, Gorbanev, Suprun, Tikhomirov, Kononenko, Prokopov, Gulyga, Pliskanovskiy, Ponomareva).

(Coke)
(Blast furnaces)

KHANIN, I.M.; AMSTISLAVSKIY, D.M.; BABKIN, M.S.

Effect of the automation of coke-oven charging on the technological indices of their performance. Koks i khim. no.2:27-28 '63. (MIRA 16:2)

1. Dnepropetrovskiy khimiko-tekhnologicheskiy institut (for Khanin).
2. Zhdanovskiy koksokhimicheskiy zavod (for Amstislavskiy, Babkin).
(Coke ovens) (Automation)

SEMISALOV, L.P.; LOBOV, A.A.; AMSTISLAVSKIY, D.M.; VEKSEL'MAN, Z.N.; CHEBOTAREV, A.V.

Effect of the shape of coke pieces on some indices of size. Koks i khim. no.9:33-37 '63. (MIRA 16:9)

1. Ukrainskiy uglekhimicheskiy institut (for Semisalov, Lobov).
2. Zhdanovskiy koksokhimicheskiy zavod (for Amstislavskiy).
3. Koksokhimstantsiya (for Veksel'man, Chebotarev).

(Coke--Testing)

VEKSEL'MAN, Z.N.; AMSTISLAVSKIY, D.M.; BABKIN, M.S.

Increasing the temperature in the head heating flues. Koks i khim. no.3:19-21 '64. (MIRA 17:4)

1. Koksokhimstantsiya (for Veksel'man). 2. Zhdanovskiy koksokhimicheskiy zavod (for Amstislavskiy, Babkin).

VEKSEL'MAN, Z.N.; AMSTISLAVSKIY, D.M.; GAVAGA, V.V.

Experiment in the heat regulation in the Giprokoks PK-42 system ovens. Koks i khim. no.7:26-28 '65.

(MIRA 18:8)

1. Koksokhimstantsiya (for Vekse1'man). 2. Zhdanovskiy koksokhimicheskiy zavod (for Amstislavskiy, Gavaga).

Amstislavskiy, F. M.

AMSTISLAVSKIY, F.M., inzh.

Use of existing potentialities in enterprises of sectional reinforced concrete. Shakht.stroi. no.9:9-11 S '57. (MIRA 10:10)
(Reinforced concrete construction)

PANTSEVICH, I.F., prof. AMSTISLAVSKIY, S.D.

Instrumental examination of the uterus after labor. Akush. i gin. 32 no.5:27-30 S-O '56. (MIRA 10:11)

1. Iz kafedry akusherstva i ginekologii (zav. - prof. I.F.Pantsevich) Krymskogo meditsinskogo instituta imeni I.V.Stalina.

(UTERUS
puerperal exam. method in diag. of puerperal compl., method)
(PUERPERIUM, compl.
diag., exam. of uterus, method)

AMSTISLAVSKIY, S.D.

Preservation of pregnancy after severe general injury with multiple fractures of the pelvic bones. Akush. i gin. 33 no.2: 98-99 Mr-Ap '57. (MLRA 10:6)

1. Iz akushersko-ginekologicheskoy kliniki (zav. - prof. I.F. Pantsevich) Krymskogo meditsinskogo instituta imeni Stalina i rodil'nogo doma No.2 (Glavnyy vrach P.I.Belokurenko).
(PELVIS--FRACTURE) (PREGNANCY, COMPLICATIONS OF)

AMSTISLAVSKIY, Ya.Ye.

High-intensity arrangement for obtaining a Fresnel interference image in white light. Usp. fiz. nauk 75 no.1:198-201 S '61. (MIRA 14:9)

(Interferometer)

AMSTISLAVSKIY, Ya.Ye.

Experiments on Fresnel diffraction from a narrow transparent ring in an opaque screen. Usp. fiz. nauk 82 no.1:163-166 Ja'64.
(MIRA 17:2)

AMSTISLAVSKIY, Ye.Ye.

Simple interferometer for studying media of low transparency.
Opt. i spektr. 17 no.4:622-624 O '64. (MIRA 17:12)

L 8436-65 AFWL/BSD/SSD/ASD(a)-5/RAEM(c)/ESD(gs)ESD(t)
ACCESSION NR: AP4048378 S/0053/64/083/003/0571/0573

AUTHOR: Amstislavskiy, Ya. Ye.

TITLE: A lecture demonstration of Young's experiment B

SOURCE: Uspekhi fizicheskikh nauk, v. 83, no. 3, 1964, 571-573

TOPIC TAGS: light diffraction, diffraction grating

Abstract: A description is given of an auditorium demonstration of the diffraction of light through two parallel and identical slits. This phenomenon has an important significance in itself for practical use (Rayleigh's interferometer and Michelson's stellar interferometer) and is also of interest as a transition step to the important case of the diffraction of light through many slits (diffraction grating).

ASSOCIATION: none

SUBMITTED: 00 ENCL: 00 SUB CODE: OP

NO REF SOV: 002 OTHER: 000 JPRS

Card 1/1

MARUASHVILI, G.M.; SAKVARELIDZE, L.A.; AMTIASHVILI, I.G.

Trichinosis in Georgia. Med.paraz. i paraz.bol.supplement to no.1: 68 '57. (MIRA 11:1)

1. Iz Instituta malyarii i meditsinskoy parazitologii imeni prof. S.S.Virsaladze Ministerstva zdravookhraneniya Gruzinskoy SSR i infektsionnogo otdeleniya Signagskoy rayonnoy bol'nitsy.
(GEORGIA--TRICHINA AND TRICHINOSIS)

AMUNTS, V.V.

Structure of the reticular formation of the brain stem; review of the literature. Zhur.nevr. i psikh. 58 no.4:492-496 '58 (MIRA 11:5)
(BRAIN STEM,
reticular form., review (Rus))

AKUNTs, V. V., Cand Med Sci -- (diss) "Cyto-architecture of the reticular formation of the brain stem of certain mammals," Moscow, 1960, 18 pp (Academy of Medical Sciences)

(KL, 38-60, 110)

AMUNTS, V. V. (Moskva)

Razvitiye retikulydrnoy formatsii mozga v rvadu mlekopitdyushchikh

report submitted for the First Moscow Conference on Reticular Formation Moscow, 22-26 March 1960.

AMINTS, V.V.

Correlation of angio- and cytoarchitectonics in the reticular formation of the brainstem. Zhur. nevr. i psikh. 65 no.4:547-551 '65. (MIRA 18.5)

1. Laboratoriya arkhitektoniki (zaveduyushchiy - doktor med. nauk N.S. Preobrazhenskaya) Instituta mozga (direktor - prof. S.A. Sarkisov) AMN SSSR, Moskva.

AMUR-SAVAN, D. A.

Calculating the required capacity of a rotary snow plow. Mekh.stroi. 9 no. 2, 1952

SO: MLRA. May 1952

AMURSKIY, G.I. (Ashkhabad); AMURSKAYA, L.G. (Ashkhabad)

River depositions in the upper reaches of the Tedzhen and Murgab Rivers. Priroda 50 no.1:103-104 Ja '61. (MIRA 14:1)
(Tedzhen Valley--Alluvium)
(Kushka Valley--Alluvium)

PREDTECHENSKAYA, T.A., kand. tekhn. nauk, dotsent; SAMSONOVA, A.V., inzh.; KOTLOVAYA, Z.A., inzh.; AMUSINA, S.L., starshiy nauchnyy sotrudnik; KUPLE, Kh.R.,[Kuple,H.], tekhnolog

Use of peracetic acid in bleaching fabrics made from cotton and polyamide fibers. Tekst. prom. 24 no.5:41-49 My '64 (MIRA 18:2)

1. Leningradskiy institut tekstil'noy i legkoy promyshlennosti imeni S.M. Kirova (for Predtechenskaya, Samsonova, Kotlovaya). 2. Latviyskiy kompleksnyy nauchno-issledovatel'skiy institut (for Amusina). 3. Kombinat "Sarkana Tekstilniyetse" Latviyskogo soveta narodnogo khozyaystva (for Kuple).

AMURSKIY, B.S., inzh.; TKACHENKO, V.Ya., inzh.

Reinforcing a shaft in a quicksand area. Shakht. stroi. 6 no.12: 18-19 D '62. (MIRA 16:5)

1. Trest Pavlogradshakhtostroy.
(Mine timbering) (Quicksand)
(Reinforced concrete construction)

KAZAKOV, N.I., tekhnik; AMURSKIY, B.S., inzh.; KOVALENKO, N. Ye., inzh.
SADOVOY, M.G., inzh.

Using metal falsework and a concrete placer in the lining of galleries.
Shakht. stroi. 5 no.6:24-26 Je '61. (MIRA 14:6)

1. Leninogorskoye shakhtostroyupravleniye.
(Mine timbering)

KAZAKOV, N.I., tekhnik; AMURSKIY, B.S., inzh.; KOVALENKO, N.Ye., inzh; SADOVOY, M.G., inzh.

Drilling rig with automatic devices for bore hole sinking. Shakht.stroi. 6 no.2:12-16 F '62. (MIRA 15:2)

1. Leninogorskoye shakhtostroyupravleniye.
(Rock drills)

AMURSKIY, B.S., inzh.; KAZAKOV, N.I., inzh.; KOVALENKO, N.Ye., inzh.; SADOVOY, M.G., inzh.

The LPBU-2 pneumatic concrete placer for mines. Mekh. stroi. 19 no.5:24-25 My '62. (MIRA 15:5)

(Concrete construction)
(Tunnel lining)

AMURSKIY, B.S., inzh.

Modernization of the PML-5 rock loader. Ugol.prom. no.5:72-73 S-O '62. (MIRA 15:11)

1. Trest "Pavlogradshakhtostroy".
(Coal mining machinery)

KAZAKOV, N.I., gornyy tekhnik; AMURSKIY, B.S., gornyy inzh.; KOVALENKO, N.Ye., gornyy inzh.; SADOVOY, M.G., gornyy inzh.

Support and drill steel holder for core drills. Gor.zhur. no.8:67-68 Ag '62. (MIRA 15:8)

1. Leninogorskoye shakhtostroyupravleniye.
(Core drilling--Equipment and supplies)

AMURSKIY, B.S., gornyy inzh.

Modernization of the PML-5 loader. Gor. zhur. no.9:74-75 S '62. (MIRA 15:9)

1. Trest Pavlogradshakhtostroy.
(Mining machinery)

AMURSKIY, B. S., inzh.; KHAN, A. A., inzh.

Banded joint of ventilation pipes. Bezop. truda v prom. 6 no.9:32 S '62. (MIRA 16:4)

(Pipe joints)

AMURSKIY, B.S., gornyy inzh.

Reinforced concrete mine sleepers with boltless timbering. Gor. zhur. no.6:65-67 Je '63. (MIRA 16:7)

1. Trest Pavlogradshakhtostroy, g. Pavlograd.
(Mine timbering—Equipment and supplies)
(Reinforced concrete construction)

AMURSKIY, B.S., inzh.

Reinforced concrete sleepers for mines. Ugol' Ukr. 7 no.7:47 Jl '63. (MIRA 16:8)

(Mine railroads--Track)
(Reinforced concrete construction)

AMURSKIY, G.I.; DRENOV, N.V.

Replotting the hydrographic net in the Bakhta River basin in the Northwestern region of Central Siberia. Izv.AN SSSR.Ser.geog. no.3: 90-95 My-Je '56. (MLRA 9:11)

(Bakhta River--Hydrography)

NAGINSKIY, N.A.; AMURSKIY, G.I.

Brief review and general chart of the parallelism of Quaternary deposits in the Kara-Kum Lowlands and in southeastern Turkmenia. Izv. AN Turk. SSR no.5:12-23 '58. (MIRA 11:12)

1.Turkmenskoye geologicheskoye upravleniye i Turkmenskiy gosudarstvennyy universitet im. A.M. Gor'kogo.
(Turkmenistan--Geology, Stratigraphic)

SOV/10-58-5-7/28

AUTHOR: Amurskiy, G.I.

TITLE: Recent Tectonic Movements in the "Shcheki" Region on Podkamennaya Tunguska River (Noveyshyye tektonicheskiye dvizheniya v rayone urochishcha "Shcheki" na r. Podkamennoy Tunguske)

PERIODICAL: Izvestiya Akademii nauk SSSR - Seriya geograficheskaya, 1958, Nr 5, pp 47-49 (USSR)

ABSTRACT: The article contains a morphological analysis of the Shcheki region situated in the Podkamennaya Tunguska river valley. Here a sharp change of the character can be observed, the valley turning from a large straight shape into a narrow twisting canyon. The analysis of the river net in the monoclinal zone and in adjacent regions leads to the conclusion that an active upheaval which had occurred was more pronounced in this part than in the neighboring regions. It is pointed out that because of this upheaval the regions with

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Recent Tectonic Movements in the "Shcheki" Region on Podkamennaya Tunguska River

sufficiently intensive disjunctive tectonics rise faster than areas adjacent to the monoclinal zone.
There are 2 charts.

AMURSKIY, G. I., Cand Geol-Min Sci -- (diss) "Quaternary deposits of Southeastern Turkmenia." Ashkhabad, 1960. 20 pp; (Administration of Geology and Preservation of Natural Resources, Council of Ministers Turkmen SSR, Central Complex Topical Expedition); number of copies not given; price not given; list of authors' works at end of text (12 entries); (KL, 31-60, 140)

KRIVENKOV, A.M.; AMURSKIY, G.I.

First Republic conference on the study of the Quaternary period of the Tajik S.S.R. Izv.AN Turk.SSR no.4:91-93 '59.
(MIRA 13:8)

(Tajikistan--Geology, Stratigraphic)

KRIVENKOV, A.M.; AMURSKIY, G.I.

First Conference of the Tajik Republic on the Quaternary Research. Biul. Kom. chetv. per. no.24:148-150 '60.
(MIRA 16:7)
(Tajikistan—Geology—Congresses)

NAGINSKIY, N.A.; AMURSKIY, G.I.

History of the old Amu Darya. Izv. vys. ucheb. zav.; geol. i razv. 3 no.6:32-37 Je '60. (MIRA 14:7)

1. Turkmenskiy gosudarstvennyy universitet.
(Amu Darya Valley--Geology, Stratgraphic)

AMURSKIY, O.I.

Find of a tooth of Equus caballus in deposits of the Kara Kum series. Izv.AN Turk.SSR.Ser.fiz.-tekh., khim.i geol.nauk no.1:100-101 '61. (MIRA 14:8)

1. Institut geologii AN Turkmenskoy SSR.
(Kara-Bogaz—Horses, Fossil)

AMURSKIY, G.I.; PARMUZIN, Yu.P.

Traces of the ancient drainage network in the western part of northern Siberia. Izv. vys. ucheb. zav.; geol. i razv. 4 no.4:33-43 Ap '61. (MIRA 14:6)

1. Moskovskiy gosudarstvennyy universitet imeni M.V.Lomonosova.
(Siberia--Paleogeography)

AMURSKIY, G.I. (Ashkhabad); AMURSKAYA, L.G. (Ashkhabad)

River depositions in the upper reaches of the Tedzhen and Murgab Rivers. Priroda 50 no.1:103-104 Ja '61. (MIRA 14:1)
(Tedzhen Valley—Alluvium)
(Kushka Valley—Alluvium)

AMURSKIY, G.I.

Yelchilek series; stratigraphy and genesis (southeastern Turkmenia). Uch.zap.SAIGIMS no.5:3-18 '61. (MIRA 15:11)
(Turkmenistan--Geology, Stratigraphic)

AMURSKIY, G.I.; MIL'SHTEYN, D.M.; SMIRNOV, L.N.; KOLPAKOVA, N.N., red. izd-va; FLUTKOVA, S.G., tekhn. red.

[Recent structure and basic characteristics of the tectonic development of southeastern Turkmenistan] Sovremennaia struktura i osnovnye cherty tektonicheskogo razvitiia IUgo-Vostochnogo Turkestana. Ashkhabad, Izd-vo Akad. nauk Turkmenskoi SSR, 1961. 67 p. (MIRA 16:1)
(Turkmenistan--Geology, Structural)

AYZBERG, R.Ye.; AMUNSKIY, G.I.

Contemporary structural plan of the Repetek fault zone. Geol. nefti i gaza 6 no.3:39-41 Mr '62. (MIRA 15:4)

1. Upravleniye geologii i okhrany nedr pri Sovete Ministrov Turkmenskoy SSR.
(Turkmenistan—Faults (Geology))

AMURSKIY, G.I.; GABRIELYANTS, G.A.; DIKENSHTEYN, G.Kh.; ISHUTIN, V.V.; SPIKIN, V.M.

Marginal flexural-fault zone of the central Kara Kum arched uplift. Biul.MOIP.Otd.geol. 37 no.5:132-134 S-O '62. (MIRA 15:12)

(Kara-Kum—Faults (Geology))

AMURSKIY, G. I.

Some problems of the geology of the Kara Kum series (southeastern Turkmenia). Trudy Inst. geol. AN Turk. SSR 3:91-115 '60. (MIRA 16:1)

(Turkmenistan—Geology, Stratigraphic)

AMURSKIY, G.I.

Origin of Neogene-Quaternary continental sediments in the southeastern part of Turkmenia. Trudy Inst. geol. AN Turk. SSR 4:166-186 '62. (MIRA 16:7)

(Turkmenistan--Geology, Stratigraphic)

AMURSKIY, G.I.

Comparative analysis of the development of some local folds in the Kara Kum Platform in the Paleogene. Geol. nefti i gaza 6 no. 11:17-22 N '62. (MIRA 15:12)

1. TSentral'naya kompleksnaya tematicheskaya ekspeditsiya.

AMURSKIY, G.I.; DIKENSHTEYN, G.Kh.

Neogene-Quaternary movements in Turkmenia. Sov. geol. 6 no.10: 32-37 O '63. (MIRA 17:1)

1. Tektonicheskaya partiya TsKTE Upravleniya geologii i okhrany nedr Tadzhikskoy SSR i Vsesoyuznyy nauchno-issledovatel'skiy geologorazvedochnyy neftyanoy institut.

AMURSKIY, G.I.; SOKOLOV, V.Ya.; SEMENTSOV, A.F.; VOLOVIK, V.T.

Recent data on the tectonics and the oil and gas potential of the fractured zones of southeastern Turkmenistan. Neftegaz. geol. i geofiz. no.8:3-6 '64. (MIRA 17:9)

1. TsKTF Upravleniya geologii i okhrany nedr pri Sovete Ministrov Turkmenskoy SSR i Trest "Turkmennefterazvedka".

AMURSKIY, G.I.

Characteristics of the development of the upper structural stage of Turkmenia. Izv. AN SSSR. Ser.geol. 29 no.6:65-78 Je '64. (MIRA 18:2)

1. TSentral'naya kompleksnaya tematicheskaya ekspeditsiya Upravleniya geologii i okhrany nedr pri Sovete Ministrov Turkmenskoy SSR, Ashkhabad.

AMURSKIY, G.I.; BORISOV, A.A.; ZHUKOBORSKIY, F.Ya.

Swells associated with deep fractures in the Kara Kum region of the Epi-Hercynian platform. Neftegaz.geol. i geofiz. no.12:32-35 '64. (MIRA 18:3)

1. TsKTE pri Sovete Ministrov Turkmenskoy SSR i Vsesoyuznyy nauchno-issledovatel'skiy institut geofizicheskikh metodov razvedki.

AMURSKIY, G.I.; BORISOV, A.A.

Manifestation of regional faults in the sedimentary cover of Turkmenia. Izv. AN SSSR. Ser. geol. 29 no.9:30-41 S '64. (MIRA 17:11)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut geofizicheskikh metodov razvedki i TSentral'naya kompleksnaya tematicheskaya ekspeditsiya Upravleniya geologii i okhrany nedr pri Sovete Ministrov Turkmenskoy SSR, Ashkhabad.

AMURSKIY, G.I.

Block structure of the Karakum region of the Turan Plateau.
Biul. MOIP. Otd. geol. 39 no.4:21-27 Jl-Ag '64.
(MIRA 17:10)

AMURSKIY, G.I.

Work of the tectonic conference discussions in Ashkhabad.
Geotektonika no.2:127 Mr-Ap '65.
(MIRA 18:5)

AMURSKIY, G.I.; VASIL'YEV, V.G.; VOL'VOVSKIY, I.S.; GARETSKIY, R.G.; GABRIELYANTS, G.A.

Basic tectonic elements in the western part of Central Asia. Neftegaz. geol. i geofiz. no.4:7-10 '65. (MIRA 18:7)

1. Upravleniye geologii i okhrany nedr pri Sovete Ministrov Turkmenskoy SSR; Vsesoyuznyy nauchno-issledovatel'skiy institut prirodnogo gaza; IG AN SSSR i Nauchno-issledovatel'skaya Sredne-Aziatskaya geofizicheskaya ekspeditsiya, kontora Spetsgeofizika.

AMURSKIY, I. G.

"The Oil Gage 'Automatic Weights,'," Energet Byul. No. 4, 1949.

S/081/62/000/005/020/112
B158/B110

AUTHOR: Amshinskiy, N. N.

TITLE: Application of data on the isotopic composition of leads for determination of the age of polymetallic mineralization in Altay

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 5, 1962, 119, abstract 5G14 (Tr. Sibirsk. n.-i. in-ta geol., geofiz. i mineral'n. syr'ya, no. 6, 1961, 102 - 105)

TEXT: This is a brief discussion of some published data on the isotopic composition of Pb in ores. The author suggests that the isotopic composition of Pb in ores in Altay conditions does not reflect the true age. 8 references. [Abstracter's note: Complete translation.]

Card 1/1

BABAYEV, A.G.; AMURSKIY, G.I.

Ancient cave dwellings in Takhta-Bazar District. Izv.Vses.geog. ob-va 93 no.5:439-441 S-O '61. (MIRA 14:10)

(Taljta-Bazar District--Cave dwellings)

AMURSKIY, G.I.

Basic features of Quaternary tectonic movements in southeastern Turkmenia. Trudy VNIGNI no.30:161-171 '61. (MIRA 14:9)
(Turkmenistan--Geology, Structural)

AMUSIN, A.M. (Leningrad)

Role of pediatric rheumatic sanatoria in the prevention of acute forms of rheumatic fever. Sov.zdrav. 20 no.5:26-28 '61. (MIRA 14:5)

1. Iz detskogo revmaticheskogo sanatoriya "Dyuny" (glavnyy vrach A.P.Pavlov) Leningradskogo gorodskogo otdela zdravookhraneniya.
(RHEUMATIC FEVER)

AMUSIN, M., starshiy nauchnyy sotrudnik

Rivercraft sails the Arctic Ocean. Rech. transp. 21 no.8:43-44 Ag '62. (MIRA 18:9)

1. TSentral'nyy nauchno-issledovatel'skiy institut ekonomiki i ekspluatatsii vodnogo transporta.

AMUSIN, M., kand. istoricheskikh nauk

Soviet Dnieper-Bug Canal is 25 years old. Rech. transp. 24 no. 10:50-51 '65. (MIRA 18:12)

AMUSIN, Mikhail Davidovich, st. nauchn. sotr.; RUMYANTSEV, S.M., red.; SIDOROV, P.P., red.

[River transportation during the completion period of the socialist reconstruction of the national economy of the U.S.S.R., 1933-1937] Rechnoi transport v period zavershe-niia sotsialisticheskoi rekonstruktsii narodnogo khoziaistva SSSR (1933-1937 gody). Moskva, Izd-vo "Rechnoi transport," 1963. 237 p. (MIRA 17:9)

1. TSentral'nyy nauchno-issledovatel'skiy institut ekonomiki i ekspluatatsii vodnogo transporta (for Amusin).

AMUSINA, Kh., inzh.; RADTSIG, V., kand.tekhn.nauk; CHAYKOVSKAYA, G., sanitarnyy vrach

Using blast furnace slag as a filtration material in purifying drinking water. Zhil.kom. khoz. 8 no.9:22-23 '58. (MIRA 11:10)
(Water--Purification) (Slag)

AMUSINA, Kh.M., inzh.; BRUK-LEVINSON, T.L., kand.tekhn.nauk

Efficient method of recovering copper sulfate from spent pickling solutions. TSvet. met. 33 no.6:27-30 Je '60. (MIRA 14:4)
(Copper sulfate)

AMUSINA, S.L., starshiy nauchnyy sotrudnik

Use of peracetic acid. Tekst. prom. 25 no.3:51-54 Mr '65.
(MIRA 18:5)

1. Latviyskiy kompleksnyy nauchno-issledovatel'skiy institut Gosudarstvennogo komiteta po legkoy promyshlennosti pri Gosplane SSR.

AMUS'YA, A.Z.; RATNER, N.S.

Evaluation of subsurface flow into mountain rivers of the Caucasus. Trudy GGI no.114:137-160 '64.

(MIRA 17:11)

AMUS'YA, A.Z.; RATNER, N.S.; FIDELLI, I.F.

Regularities of the distribution of base flow into rivers along the territory of the mountainous Caucasus. Trudy GGI no.122: 32-50 '65. (MIRA 18:9)

ACC NR: AT6034488 SOURCE CODE: UR/3186/66/000/133/0059/0073

AUTHOR: Amus'ya, A. Z.; Ratner, N. S.

ORG: none

TITLE: Subsurface drainage into the mountain rivers of Central Asia

SOURCE: Leningrad. Gosudarstvennyy gidrologicheskiy institut. Trudy, no. 133, 1966. Issledovaniya podzemnogo stoka v reki (Studies of base flow into rivers), 59-73

TOPIC TAGS: drainage system, surface water, hodograph, underground water, rain, snow / Central Asia

ABSTRACT: The Makarenko method (genetic analysis of hodographs) is used to make a quantitative estimate of the subsurface drainage into the mountain rivers of Central Asia. Subsurface waters in these regions originate primarily from melting seasonal and permanent snows and glaciers, rainfall generally playing a secondary role (less than 15% in the larger rivers and almost zero in the high mountain streams where the rainfall (maximum in the summer) is largerly lost through evaporation). The dynamic coefficient of well and river discharge depends on rock lithology and structure, as well as on climatic conditions in each

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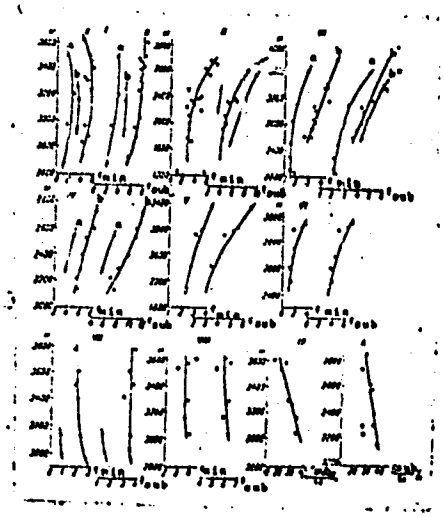

Fig. 1. Relationship of subsurface drainage characteristics to the mean elevation of the catchment area for different regions of Central Asia

I - Lake Issyk-Kul' basin; II - Dzhungarskiy Alatau (Mts.); III - southern slopes of the Gissar Range; V - western part of the Zeravshan River basin; VI - Talas River basin; VII - Naryn River basin; VIII, IX - eastern part of the Zeravshan River basin; X - southern slopes of the Gissar Range.

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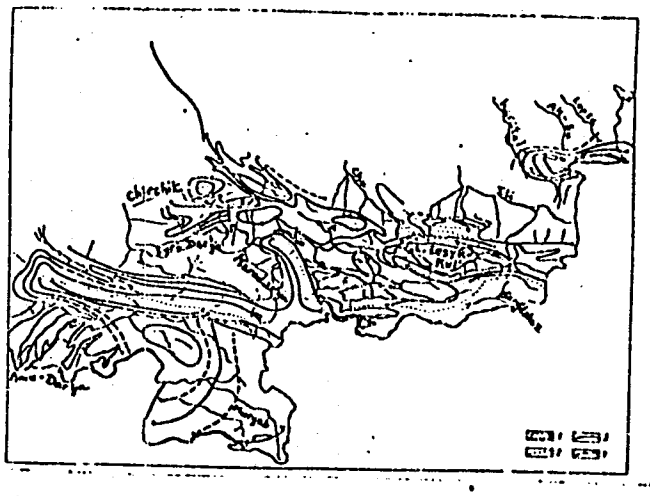

Fig. 2. Map of the mean annual subsurface discharge into the rivers of the mountainous portion of Central Asia

1 - Intermontane basins; 2 - principal watersheds; 3 - isolines of mean annual subsurface discharge; 4 - approximate values.

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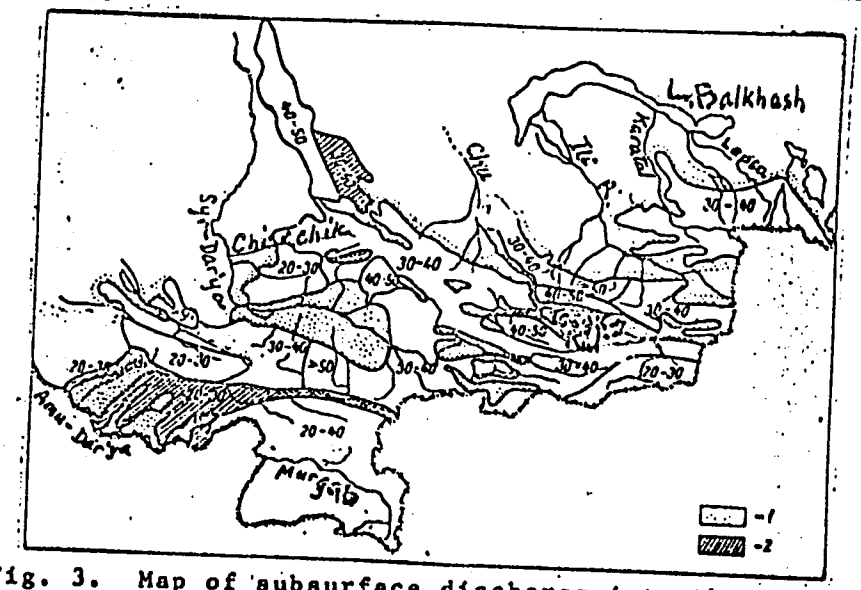

Fig. 3. Map of subsurface discharge into the rivers of the mountainous portion of Central Asia (in % of total stream runoff)

1 - Intermontane basins; 2 - approximate values.

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ACC NR: AT6034488

individual area. River-gage data for the 1936-1958 period were analyzed to derive the following characteristics of subsurface drainage: mean annual discharge (runoff volume), subsurface runoff depth, coefficient of subsurface discharge into the rivers, and the minimum discharge, by year, during low-water periods. Results are tabulated in graphic form for the relationship of subsurface-flow characteristics to the average elevation of the catchment area for nine areas in Central Asia (see Fig. 1), on a 1:2,500,000 map (see Fig. 2), and on a map showing subsurface drainage into mountain rivers in percentages of total river discharge (see Fig. 3). It is estimated that the total subsurface water reserves accumulate in this region at the rate of 55.5 km/yr. The mean subsurface discharge into rivers is 3.97 ℓ/sec km^2, an amount which is 1.5 times smaller than that in the Caucasus, and twice as much as that in the Urals. Over the entire area, the coefficient of subsurface discharge varies between 20—40%. Orig. art. has: 5 figures and 5 tables.

[W.A. 50]

SUB CODE: 08/ SUBM DATE: none/ ORIG REF: 018

Card 5/5

AMUS'YA, M.Ya., student

Theoretical analysis of the operation of a device for lowering maximum pressures in a diesel cylinder. Trudy LKI no.28:173-183 '59. (MIRA 15:5)

1. Mashinostroitel'nyy fakul'tet Leningradskogo korablestroitel'nogo instituta.

(Diesel engines)

AMUS'YA, M.Ya., inzh.

Kinematics of offset crankgears. Izv. vys. ucheb. zav.,; mashinostr. no. 10:31-41 '60. (MIRA 14:1)

1. Leningradskiy korablestroitel'nyy institut.
(Cranks and crankshafts)

AMUS'YA, M.Ya., inzh.

Effect of the noncoaxiality of a crankgear on the force of collision of the piston and the bushing during a throw-over. Izv. vys. ucheb. zav.; mashinostr. no.6:52-66 '61. (MIRA 14:7)

1. Leningradskiy korablestroitel'nyy institut.
(Machinery, Kinematics of)

AMUS'YA, M.Ya.

Dependence of the internuclear potential parameters on the number of particles. Zhur.eksp.i teor.fiz. 38 no.3:834-842 Mr '60. (MIRA 13:7)

1. Leningradskiy fiziko-tekhnicheskiy institut Akademii nauk SSSR.

(Nuclei, Atomic)

S/056/60/039/003/014/045
B006/B063

AUTHOR: Amus'ya, M. Ya.

TITLE: The Ground States of Atomic Nuclei. I 19

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, 1960, Vol. 39, No. 3(9), pp. 639-650

TEXT: The purpose of the present work was to formulate a variational principle and to apply it to a many-particle system with two-particle interaction. The wave function is formulated in such a way that the pair correlation may be fully taken into account. Equations are derived for the single- and two-particle functions in first approximation with respect to the correlation. It is found that these equations can be easily generalized for the case of strong correlation and three-particle interaction. The resulting equations are applied to the case of nuclear matter, and are compared with Brueckner's formulas. It is further shown that the variational principle (2) for finite systems cannot guarantee saturation of nuclear forces. The results obtained are briefly discussed. The large matrix element is explicitly and fully written down in an appendix, and Figs. 2-6 show graphs for some matrix elements occurring in this formula.

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The Ground States of Atomic Nuclei. I

S/056/60/039/003/014/045
B006/B063

From these matrix elements the author derives numerous rules which allow to find an expression for the energy of a many-particle system if the corrections of second, third, and higher degree with respect to the correlation functions are taken into account. These rules are given for the graphs No. 1-8. The variational principle underlying the present work reads $\delta E/\delta\varrho(\vec{r}) = 0$ or $\delta((\psi|\hat{H}|\psi)-E(\psi|\psi))/\delta\psi^{*}\psi = 0$, where E is the total energy of the system of interacting particles, and $\varrho(\vec{r})$ is the particle distribution density in it. The author thanks Professor L. A. Sliv, G. M. Shklyarevskiy, and B. L. Birbrair for discussions. There are 6 figures and 9 non-Soviet references.

ASSOCIATION: Leningradskiy fiziko-tekhnicheskiy institut Akademii nauk SSSR (Leningrad Institute of Physics and Technology of the Academy of Sciences USSR)

SUBMITTED: March 22, 1960

Card 2/2

S/056/61/041/002/013/028
B111/B112

24.7000

AUTHOR: Amus'ya, M. Ya.

TITLE: Fermi systems with attractive and repulsive interaction

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki , v. 41, no. 2, 1961, 429 - 440

TEXT: The author studies a homogeneous spatially unbounded system of Fermi particles with pair interaction by means of the quantum field theoretical method. The potential of the nucleon-nucleon interaction consists of two components: U (attractive potential) and V (repulsive potential) with the radii b and a; in this case $|U| \ll |V|$, $a \ll b$. The study is rendered difficult due to the lack of a small parameter which could permit the estimation of the perturbation theory and its summation. The author introduces two parameters $p_0 a \ll 1$ and $p_0 b \gg 1$ (p_0 - momentum of the Fermi system). He expands the energy of the ground state and the excitation energy of a

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Fermi systems with ...

particle with respect to the terms $p_0 a$ and $1/p_0 b$. The author demonstrates that under certain conditions states exist which are described by $E_p < 0$, $\partial E_p/\partial \rho = 0$, $\partial^2 E_p/\partial \rho^2 > 0$ (ρ is the intermediate density, E_p - is the energy of one particle). In this case all graphs whose contribution to the energy is not smaller than that of the gas approximation are taken into account. In the second chapter the author determines the possible graphs from the S-matrix. In order to find out the conditions under which a state with $\frac{\partial E_p}{\partial \rho} = 0$ exists, the dependence of the matrix elements on p_0 must be known. Since this dependence differs for various potentials, the author makes estimations for the following three potentials: 1) $U = (U_{01}/r\nu_1)\exp(-\nu_1 r)$, 2) $U = U_{02}\exp(-\nu_2 r)$, 3) rectangular potential well of the depth U_0 and the radius b. In the third chapter the energy of the ground state and the equation of state for a system with double interaction are

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S/056/61/041/002/013/028
B111/B112

calculated on the condition that $\Sigma(p)$ can be approximated by a second-order parabola in the range $0 < p < 1/a$. The author also calculated a series of the graphs mentioned. The equation of state of the gas is $P = \rho^2 \partial E_p / \partial \rho$ (P - pressure). In the following chapter the author studies cases where $P = 0$. He concludes that in these special cases the results are independent of the shape of U. When calculating the nucleon-nucleon interaction this problem can be dealt with as a special case only on the assumption that a strong short-range repulsion exists and that a considerable part of U are exchange forces. Finally, the author compares the set of equations obtained for the ground state with the Brueckner equation which corresponds to the gas approximation. The author thanks Professor L. A. Sliv, G. M. Shklyarevskiy and D. A. Kirzhnits. V. M. Galitskiy (Ref. 5: ZhETF, 34, 151, 1958) is mentioned. There are 7 figures and 13 references: 4 Soviet and 9 non-Soviet. The most important references to English-language publications read as follows: K. A. Brueckner, J. L. Gammel, Phys. Rev., 109, 1023, 1958; M. Gell-Mann, K. A. Brueckner, Phys.

27192

Fermi systems with ...

S/056/61/041/002/013/028
B111/B112

Rev., 106, 364, 1957.

ASSOCIATION: Fiziko-tekhnicheskiy institut Akademii nauk SSSR (Institute of Physics and Technology of the Academy of Sciences, USSR)

SUBMITTED: February 4, 1961

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S/056/62/043/001/039/056
B102/B104

AUTHOR: Amus'ya, M. Ya.

TITLE: Green's single-particle function for a Fermi system with attractive and repulsive interaction

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 43, no. 1(7), 1962, 287-300

TEXT: The interaction in multi-particle systems has hitherto been studied mainly perturbation theoretically for the limiting cases of very low (gas approximation) and of very high densities. In a previous paper (ZhETF, 41, 429, 1961) the author expanded a Green's single-particle function perturbation theoretically on the basis of two parameters. These results, together with some others are here applied to an unbounded system of Fermi particles with two-particle interaction. The interaction consists of the attraction U (radius b) and the repulsion V (radius a) where $b \gg a$ and $U \ll V$. The system investigated should have a mean density, so that $b^3 \rho \gg 1$ and $a^3 \rho \ll 1$. Using the graph technique, the real part of the self-

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energy $\Sigma(\vec{p})$ that enters the Green's function is studied. $Im\Sigma$ is negligibly small. The expression obtained for $Re\,\Sigma(\vec{p})$ characterizing the spectrum of the single-particle excitations on the Fermi surface depends upon the effective masses and, of course, upon the chemical potential. Subsequently, these components are considered and an expression is derived for the sound velocity. In all cases particular interest is taken in the self-contracting system ($E_m < 0$, $\partial E_m/\partial\rho = 0$, $\partial^2 E_m/\partial\rho^2 > 0$, E_m - mean energy per particle). Among other things it can be shown that Σ can be expanded in terms of the two parameters $a\rho^{1/3}$ and $1/b\rho^{1/3}$. All graphs whose contribution to Σ is not smaller than the gas approximation term quadratic in a are taken into account. The effective masses largely depend on the kind of the acting forces. The results obtained are applied to a two-component system of the nuclear matter and it is assumed that the excitation is sufficiently close to the Fermi surface. For E_m -15.3 Mev is obtained. This agrees well with the first term of the semi-empirical Weizsäcker nuclear mass formula (-15.5 Mev). $Re\Sigma = (-54+0.32E)$Mev is obtained if $E > 0$ and $K \simeq 350$ Mev is obtained for

Green's single-particle function for a ...

the nuclear compressibility. There are 6 figures.

ASSOCIATION: Leningradskiy fiziko-tekhnicheskiy institut Akademii nauk SSSR (Leningrad Physicotechnical Institute of the Academy of Sciences USSR)

SUBMITTED: February 26, 1962 (initially)
April 5, 1962 (after revision)

Card 3/3

S/056/62/043/003/031/063
B102/B104

AUTHOR: Amus'ya, M. Ya.

TITLE: The optical potential of heavy nuclei

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 43, no. 3(9), 1962, 942-952

TEXT: The imaginary part of the optical potential $V = V(r) + iW(r)$ is investigated by studying the imaginary part of the single-particle Green function, on the basis of a two-parameter model of nuclear matter which this author developed in ZhETF, 41, 429, 1961 and 43, 287, 1962. In a special form of the single-particle amplitude equation in momentum representation

$$\left[E_0 - \frac{p^2}{2} - \mathrm{Re}\,\Sigma(p, E_0) - i\frac{\mathrm{Im}\,\Sigma(p, E_0)}{1 - \partial\,\mathrm{Re}\,\Sigma(p, E)/\partial E\,|_{E=E_0}}\right]\psi(E_0, p) = 0. \quad (4)$$

holds near $E_0 - p^2/2 - \Sigma(p, E_0) = 0$, which is equivalent to the Schrödinger equation of the optical model, $\mathrm{Re}\Sigma = V$ and $\Gamma = \mathrm{Im}\Sigma/(1 - \mathrm{Re}\Sigma/dE) = W$ for $E_0 > 0$. On the assumption of Serber forces acting in the nuclear system

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The optical potential of heavy ...

$$W = -\frac{1}{(8\pi)^3}\frac{(E-\lambda)^2}{p_0}\mu_{eff}^3\int_0^{2p_0} dq\left\{\frac{9U^2(q)}{[1-3p_0|U(q)|/4\pi^3]^3+9q^3U^2(q)/(16\pi)^3}+\right.$$
$$\left.+\frac{15U^2(q)}{[1+p_0|U(q)|/4\pi^3]^3+q^3U^2(q)/(16\pi)^3}\right\}-\frac{2}{(8\pi)^3}\frac{ap_0}{\mu_1}\frac{(E-\lambda)^2}{p_0^2}\mu_{eff}^3\times \quad (5)$$
$$\times\int_0^{2p_0} dq\left\{\frac{9U(q)}{[1-3p_0|U(q)|/4\pi^3]^3}+\frac{15U(q)}{[1+p_0|U(q)|/4\pi^3]^3}\right\}-(E-\lambda)^2\mu_{eff}^3\frac{3}{\pi|\mu_1}a^2.$$

which, for very high energies E, goes over into

$$W = -\frac{3\pi}{\sqrt{2}}\rho(r)\sqrt{E}a^2\left[1+\frac{U_0b}{aE}\ln\frac{E}{3p^{3/2}}\right] \quad (6).$$

This is valid if

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$$\operatorname{Im}\Sigma \approx -\frac{4}{3\pi} p_0^4 a \frac{U_0}{\nu p_0} \frac{1}{p} \ln \frac{p}{p_0} - \frac{1}{3\pi} p_0^3 p a^3, \qquad (23)$$

with $U(q) = \frac{4\pi U_0}{\nu} \cdot \frac{1}{q^2 + \nu^2}$. b) $p < p_0$. For $p = 0$,

$$\operatorname{Im}\Sigma \approx 0{,}636 p_0^2 \left(\frac{U_0}{\nu p_0}\right)^2 \left| \ln \frac{U_0}{p_0 \nu} \right| + 0{,}318 p_0^3 \frac{a p_0}{\mu_1} \left(\frac{U_0}{\nu p_0}\right) + 0{,}08 p_0^3 \frac{(p_0 a)^4}{\mu_1}. \qquad (29).$$

These cases correspond to $p_0 b \gg 1$ and $p_0 a \ll 1$ where b and a are the attraction and repulsion radii. Since, in the inner region of heavy nuclei, $p_0 a \approx 0.6$ and $p_0 b \approx 3.5$, the relations deduced are estimates which can be used for calculations of optical potential. From these formulas, which apply not only to nuclear matter but also to calculations of spectra of other systems, it can be generally concluded for $E \approx 5 - 10$ Mev that the value of W on the nuclear surface is large, and for $E > 100$ Mev that $\alpha \sim \varrho$. For single-particle of hole excitations ($E < 0$) damping occurs at the surface of the system. There are 4 figures. The most important

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