

ACC NR. AM6005564

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SUB CODE: 20/ SUBM DATE: 02Jul65/ ORIG REF: 022/ OTHER REF: 007

Card 4/4

SADEMACH, H.

Rolling threads by means of cutting heads.

p. 479 (Strojirenska Vyroba. Vol. 5, no. 10, Oct. 1957, Praha, Czechoslovakia)

Monthly Index of East European Accessions (EEAI) IC. Vol. 7, no. 2,
February 1958

SADENKO, V.

SEMIN, A.; SADENKO, V.; PROSYANKIN, P. (g. Ryazan')

Planning and calculating trolley bus passenger transportation. Zhil.-
kom.khoz.5 no.5:29 '55. (MLRA 8:11)

(Trolley buses)

SADENKO, V.

CHESTNYI, M.G., inzhener-ekonomist; SEMIN, A.; SADENKO V.

Calculating unit for determining the cost of the city passenger transport. Gor. khoz. Mosk. 31 no.2:31-33 P '57. (MIRA 10:4)

1. Direktor upravleniya trolleybusa goroda Ryazani (for Semin). 2. Na-
chal'nik sluzhby dvizheniya (for Sadenko).
(Local transit--Cost of operation)

SEMIN, A.; SADENKO, V.--

Among the leading workers in the competition. Zhil.-kom. khoz. 10
no.11:14-15 '60. (MIRA 13:11)

1. Direktor Upravleniya ryazanskogo trolleybusnogo khozyaystva (for
Semin). 2. Nachal'nik planovo-proizvodstvennogo otdela Ryazanskogo
trolleybusnogo khozyaystva; sekretar' partbyuro (g.Ryazan) (for
Sadenko).

(Ryazan--Trolley buses)

SADETOV, S. Ya.

"Calculation of the Stability of High Hinge-Rod Systems." Sub 16 Jan 51, Moscow
Order of the Labor Red Banner Construction Engineering Inst imeni V. V. Kuybyshev

Dissertations presented for science and engineering degrees in Moscow during 1951.

SO: Sum. No. 480, 9 May 55

SADETOV, S. YA.

"Calculation of Stability of High Hinge-Rod Systems".
Sb. tr. Mosk. inzh.-stroit, in-ta, No 8, pp 42-65, 1954

Sets forth a method of calculating the stability of high tridimensional systems of a square cross section by differentiating them into two plane systems, working each system in the plane of its framework. Uses equations of critical load for truss according to the formula of S. P. Timoshenko, F. Blake, F. Mises, and A. N. Dinnik. Bibliography, 11 references. (RZhMekh, No 8, 1955)

SO: Sum No 812, 6 Feb 1956

SOV/124-57-8-9570

Translation from: Referativnyy zhurnal. Mekhanika, 1957, Nr 8, p 141 (USSR)

AUTHOR: Sadetov, S. Ya.

TITLE: Stability Analysis of Three-dimensional Pin-hinged Trusses (Raschet ustoychivosti prostranstvennykh sharnirno-sterzhnevnykh sistem)

PERIODICAL: Tr. Rostovsk.-n/D. inzh.-stroit. in-ta, 1956, Nr 5, pp 177-188

ABSTRACT: Bibliographic entry

Card 1/1

SADETUV, S.Ya., kand. tekhn. nauk

Stability analysis of high hinged-rod systems with triangular web
reinforcements and additional supports. Trudy RISI no.6:141-143
'58.

(Girders)

(MIRA 12:6)

SADETOV, S.Ya., kand.tekhn.nauk dots.

Formula of binary moments in initial parameters. Trudy RISI
no.11:18-26 '58. (MIRA 13:5)

1. Rostovskiy-na-Donu inzhenerno-stroitel'nyy institut.
(Elastic rods and wires--Electormechanical analogies)

ZALUNIN, K.P.; PIKOVSKIY, A.A.; prof., doktor .tekh.nauk, nauchnyy
rukovoditel', red.; SADETOV, S.Ya., dots., kand.tekh.nauk. otv.
red.

[Deformation analysis of composite rods and compressed rods with
variable cross sections] Deformatsionnyi raschet szhatykh sterzhnei
peremennogo sechenia i sostavnykh sterzhnei. Rostov-na-Donu,
1958. 49 p. (Rostov-on-Don. Inzhenerno-stroitel'nyi institut.
Nauchnoe soobshchenie, no.2). (MIRA 13:9)
(Elastic rods and wires)

KEROFYAN, K.K., prof., doktor tekhn. nauk, red.; PUKHOV, G.Ye., prof., doktor tekhn. nauk, red.; UGODCHIKOV, A.G., prof., doktor tekhn. nauk, red.; SADETOV, S.Ya., dots., kand. tekhn. nauk, red.; GUNKIN, I.I., assistant, red.; CHEGOLIN, P.M., dots., kand. tekhn. nauk, red. (Minsk)

[Proceedings of the Inter-University Conference on Electric Modeling of Problems of Structural Mechanics, Theory of Elasticity, and Strength of Materials] Trudy Mezhvuzovskoi nauchno-tekhnicheskoi konferentsii po elektricheskomu modelirovaniu zadach stroitel'noi mekhaniki, teorii uprugosti i soprotivleniia materialov. Pod red. K.K. Keropiani i A.G. Ugodchikova. Novocherkassk, Rostovskii inzhenerno-stroitel'nyi in-t, 1962. 176 p. (MIRA 17:4)

1. Mezhvuzovskaya nauchno-tekhnicheskaya konferentsiya po elektricheskomu modelirovaniyu zadach stroitel'noy mekhaniki, teorii uprugosti i soprotivleniya materialov. 2d, Rostov-na-Donu, 1962. 2. Rostovskiy-na-Donu inzhenerno-stroitel'nyy institut (for Keropyan, Sadetov, Gunkin). 3. Chlen-korrespondent AN Ukr.SSR i Vychislitel'nyy tsentr AN SSSR (for Fukhov). 4. Gor'kovskiy inzhenerno-stroitel'nyy institut (for Ugodchikov).

SADETOV, S.Ya.; BYCHKOV, D.V., doktor tekhn.nauk, prof., retsenzent;
BORODINA, N.N., red.; ZORINA, V.A., tekhn. red.

[Designing thin-walled rods of open profile] Raschet tonko-
stennykh sterzhnei otkrytogo profil'ia. [n.p.] Rosvuzizdat,
1963. 83 p. (MIRA 17:3)

1. Moskovskiy inzhenerno-stroitel'nyy institut (for Bychkov).

S/271/63/000/003/022/049
A060/A126

AUTHOR: Sadetov, T.S.

TITLE: Arch design by the method of electromechanical simulation

PERIODICAL: Referativnyy zhurnal, Avtomatika, telemekhanika i vychislitel'naya tekhnika, no. 3, 1963, 6, abstract 3B33 (Tr. Rostovsk. inzh.-stroit. in-ta, 1961, no. 23, 111 - 115)

TEXT: A method is proposed for determining the values of bending moments in any section of an arch by replacing the arch with a broken rod by movable supports. Then the design of the arch is reduced to the design of a continuous multi-span beam with movable supports. To determine the displacement of the supports it is proposed to use the method of electro-mechanical simulation of problems of structural engineering according to which one adds to the electrical model of the continuous beam a mechanical model of the arch made to a definite scale. The proposed method is illustrated by an example of construction of a profile of bending moments in a statistically indeterminate 2-hinge arch loaded with a concentrated force. There are 4 figures, 1 table and 5 references.
[Abstracter's note: Complete translation] I. V.

Card 1/1

KURBANOV, A.K.; SADICHIKOV, P.B.

Simultaneous withdrawl of oil and water from planktonic oil pools with
a gas cap. Nauch.-tekhn. sbor. po dob. nefti no.24:57-62 '64.
(MIRA 17:10)

1. Vsesoyuznyy neftegazovyy nauchno-issledovatel'skiy institut.

POLAND

PO/0082/65/000/011/0070/0073

AUTHOR: Sobieniecki, Wlodzimierz (Commander, Doctor); Sadkiewicz, Adam
(Lt. Commander, Doctor)

ORG: none

TITLE: Ergonomics in the navy

SOURCE: Przegląd morski, no. 11, 1965, 70-73

TOPIC TAGS: naval psychology, psychophysiology, psychologic stress, working condition, psychometry, behavior pattern, operations research

ABSTRACT: The principle of ergonomics are discussed and the desirability of applying this science to the training of naval personnel is stressed. The wide range of problems with which ergonomics is concerned can be profitably studied aboard ship. Ergonomic research will make it possible to utilize the human factor in military service.

1/1

SAMEDOV, F.I.; SADIGOV, A.M.; SULTANOV, Ch.A.

Interfacial mobility and reservoir performance of the pool 7
in the Karadag field. Izv. AN Azerb. SSR Ser. geol.-geog.
nauk i nefti no.5:13-18 '62. (MIRA 16:6)

(Karadag region—Condensate oil wells)

SAMEDOV, F.I.; SADIGOV, A.M.; SULTANOV, Ch.A.

Water encroachment of upper parts of the Sub-Kirmaki series in
the Zyrya field. Dokl. AN Azerb. SSR 18 no.9:29-36 '62.
(MIRA 17:1)

1. Institut neftyanykh i gazovykh mestorozhdeniy AN AzSSR.
Predstavleno akademikom AN AzSSR Sh.F. Mekhtiyevym.

SADIGOV, A.M.

Change of oil properties in the Surakhany series of the Bibiebat
field. Dokl. AN Azerb. SSR 19 no.11:35-40 '63. (MIRA 17:3)

L 35332-66 FSS-2 TT/GW

ACC NR: AP6009136

SOURCE CODE: CZ/0087/65/000/003/0004/0005

AUTHOR: Sadil, J.

41
B

ORG: None

TITLE: The Moon and the Zond-3 space probe

SOURCE: Radar, no. 3, 1965, 4-5

TOPIC TAGS: Moon, lunar surface, space probe/~~Zond-3~~

ABSTRACT: The author discusses certain photographs taken by the Soviet Zond-3 space probe. He agrees with the theory of USSR experts E. J. Ruskolova and B. J. Levin on the asymmetry of the two sides of the Moon. This theory considers the origin of the lunar seas as a result of explosions of foreign celestial bodies which, billions of years ago, circled in the adjacent space as satellites of the Earth-Moon system and ultimately fell on the Moon and exploded. Further gravitational and other processes occurred in the Moon's crust within and around these places of impact and led to the creation of basins, now referred to as lunar seas, mountains, and cracks through which lava burst out. The Sea of Nectar and the Eastern Sea are cited as a possible evidence of such development. Theories of Soviet Academician A. A. Mikhaylov on the origin of craters displaced around the Eastern Sea, and of A. G. Masevich on tallasoids are given. A diagram of the Zond-3 Earth-Moon trajectory to the section where

Card 1/2

CZECHOSLOVAKIA UDC 616.633(:547.587.43):616-003.829.7:616.633
(547.587.21)-074

KRIZEK, V.; JIRKA, M.; SADILEK, L.; Research Institute for Phys-
iatry, Balneology, and Climatology (Vyzkumny Ustav pro Fyziatrii,
Balneologii a Klimatologii), Marianske Lazne, Director (Reditel)
Prof Dr K. PREROVSKY; Institute for Investigation of Child Evol-
ution, Pediatric Clinic, Charles University (Ustav Vyzkumu Vyvoje
Ditete Fakulty Detskeho Lekarstvi KU), Prague, Director (Reditel)
Prof Dr J. HOUSTEK.

"Contribution to the Mechanism of Excretion of Homogentisic and Gen-
tistic Acids by Kidneys."

Prague, Casopis Lekarů Geskych, Vol 105, No 30, 15 Jul 66, pp
793 - 798

Abstract [Authors' English summary modified]: The mechanism was
investigated in 6 patients with al apatonuria. Homogentisic acid
is excreted by glomerular filtration and tubular secretion and cor-
responds to the clearance of p-aminohippuric acid. Benemid reduces
the excretion. Gentisic acid is reabsorbed by the tubules, thereby
differing from the mechanism shown by homogentisic acid. Its trans-
port through the tubular cells proceeds in the opposite direction.
4 Figures, 5 Tables, 11 Western, 15 Czech, 3 Japanese references.
1/1
(Ms. rec. Mar 66).

DEJANOV, I., dr.; SADIKARIO, A., doc. dr.; TADZER, I.S., doc. dr.

Minor form of hemophilia. Med. glasn. 13 no.5:316-321 My '59.

1. Institut za patofiziologiju Medicinskog fakulteta u Skoplju,
upravnik: doc. I.S. Tadzer; Klinika za decje bolesti u Skoplju,
V.d. upravnika : H.A. Dima.
(HEMOPHILIA)

SADIKARIO, Avram; MLADENOVSKI, Budimir

Some experiences with the treatment of rheumatoid arthritis
in children. God,Zborn.Med,Fak,Skopje no.10:100-105 '63.

Value of laboratory studies in the evaluation of the progress
of rheumatic arthritis in children. Ibid.:181-186

1. Klinika za decje bolesti medicinskog fakulteta - Skopje
(Upravnik: Doc. Dr. H. Duma).

SADIKARIO, A.; MLADENOVSKI, B.; DZARLIEVA, R.; HRISTOVA, C.

Some special aspects of diabetes mellitus in childhood.
God. zborn. med. fak. Skopje 11:165-179 '64.

1. Klinika za detski bolesti pri medicinskiot fakultet,
Skopje (upravitel: prof. d-r. H. Duma).

SADIKARIO, A.; PRILEPCANSKI, I.; MLADENOVSKI, B.; SAJKOVSKI, M.

Clinical and epidemiologic aspects of Q fever. God. zborn.
med. fak. Skopje 11:181-187 '64.

1. Republicki zavod za zdravstvena zastita vo Skopje (direktor:
prim. d-r. G. Tofovski) i Klinika za detski bolesi pri medicin-
skiot fakultet, Skopje (direktor: doc. d-r. H. Duma).

SADIKARIO, A.; KOTEVSKA, R.; DONEVA, V.; ZDRAVEVA, M.

Some clinical and evolutionary aspects of nephrotic syndrome
in children. God. zborn. med. fak. Skopje 11:189-199 '64.

1. Klinika za detski bolesti pri medicinskiot fakultet vo
Skopje (upravitel: prof. d-r. Hristo Duma).

SADIKOV, A. A.

"Method of Determining Load-Lifting Capacity and Boom of Self-Propelled and Nonself-Propelled Floating Cranes." Cand Tech Sci, Gor'kiy Inst of Water Transport Engineers, Min of River Fleet USSR, Moscow, 1954. (KL, No 8, Feb 55)

SO: Sum. No. 631, 26 Aug 55-Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (14)

SADIKOV, A.

Coordinated techniques for bundled lumber transportation. Rech.
transp. 14 no.10:20-21 0 '55. (MLBA 9:1)

1. Nauchnyy sotrudnik Instituta kompleksnykh transportnykh problem
Akademii nauk SSSR.
(Lumber--Transportation)

SADIKOV, A., kandidat tekhnicheskikh nauk.

Mechanized unloading of barges with a one-cable clamshell bucket.
Rech. transp. 14 no.11:24 N '55. (MLRA 9:2)
(Loading and unloading)

SADIKOV, A.A.

Engineering policy in the development of the water front and the
mechanization of loading and unloading operations. Rech.transp.
15 no.5:16-18 My '56. (MLRA 9:8)

1. Nauchnyy sotrudnik instituta kompleksnykh transportnykh problem.
(Harbors) (Cargo handling)

SADIKOV, A. A.

GAO-YUAN' [Kao Yuan]; SADIKOV, A.A.

Prospects for the development of river transportation in the
Amur Basin, Rech.transp. 16 no.5:9-11 My '57. (MLRA 10:5)

1. Rukovoditel' transportnykh issledovaniy Kheylunzyanskoy ekspeditsii
Akademii nauk Kitayskoy Narodnoy Respubliki, direktor Instituta
vodnogo transporta (for Gao-Yuan') 2. Nachal'nik transportnogo otryada,
nauchnyy sotrudnik Instituta kompleksnykh transportnykh problem
Akademii nauk SSSR (for Sadikov)

(Amur River--Inland water transportation)

SADIKOV, B. A.

D-1 SADIKOV, B. A. O metodike prepodavaniya magnetizma (On the methods of teaching magnetism). In: Vestnik vysshey shkoly (Moscow), 9:46, 1951. DLC L51.42; OUMF No. 172-1;Fdd.

Presentation of a new formula for magnetic interaction which allows for the development of the theory of magnetism from the modern point of view,.

S.A.
Sect. A SADIKOV, B.A.

Magnetics

538.11 : 537.36 : 621.3.013

5893. Electro-dynamical explanation of the laws of magnetostatics. B. A. SADIKOV. *Elektronika*, No. 1, 34-41 (1952) *In Russian*.

A systematic and more complete treatment of the main problems of magnetostatics based on the work of V. K. Arkadiev in his book *Electromagnetic Processes in Metals* (Moscow, 1935). The flux density set up by a circular current is first considered and the magnetic moment of such a current is introduced, then proceeding to infinite and finite solenoids to replace magnetic poles and bar magnets.

B. F. KRALB (R)

TELESNIN, Roman Vladimirovich; YAKOVLEV, Vitaliy Fedorovich; SADIKOV,
B.A., red.; KREYS, I.G., tekhn. red.

[Course in physics; electricity] Kurs fiziki; elektrichestvo.
Moskva, Gos. uchebno-pedagog. izd-vo M-va prosv. RSFSR, 1960.
455 p. (MIRA 14:5)
(Electricity) (Magnetism)

SADIKOV, B.A. (Moskva)

Concepts of potential difference, electromotive force, and
voltage in theoretical electric engineering. Fiz.v shkole 21
no.3:94-99 My-Je '61. (MIRA 14:8)
(Electricity--Study and teaching)

ZHARKOVA, Yu.V.; SADIKOV, B.A.; GORBATOV, Yu.B., retsenzent;
SHCHERBAKOVA, Ye.A., retsenzent

[Problems in physics] Zadachnik po fizike. Moskva, Pt.2.
1963. 130 p. (MIRA 18:2)

1. Moscow. Energeticheskiy institut. 2. Kafedra fiziki
Moskovskogo energeticheskogo instituta (for Gorbatov,
Shcherbakova).

SADIKOV, F.P., kand. tekhn. nauk

Standard technological procedures in the operation of classification yards. Zhel. dor. transp. 46 no.7:87-88 J1 '64.
(MIRA 17:8)

38432

S/076/62/036/006/008/011
B117/3138

21,2300

AUTHORS: Kuleshov, I. M., Sadikov, G. G., and Sokolova, Z. A.

TITLE: Neutron diffraction study of highly refractory beryllium oxide

PERIODICAL: Zhurnal fizicheskoy khimii, v. 36, no. 6, 1962, 1369 - 1371

TEXT: The effect of high temperatures on the crystal lattice of beryllium oxide was studied by neutron diffraction on polycrystalline beryllium oxide sample in vacuo at 2000°C (R. P. Ozerov, S. V. Kiselev et al. Kristallografiya, 5, 317, 1960) in the WPT-1000 (IRT-1000) reactor. Hexagonal lattice constants determined from the neutron diffraction pattern recorded with a D11-09 (EPP-09) electron potentiometer, agreed with data determined graphically for the same kind of sample ($a = 2.695 \text{ \AA}$, $c = 4.39 \text{ \AA}$). The presumable position of beryllium atoms in the crystal lattice of the compound studied was examined by comparing experimental and theoretical reflexion intensities. The divergence between theoretical and experimental data was assumed to be due to the Debye heat factor B . $B = 0.92 \pm 0.02$ was calculated from experimental results and the characteristic temperature $\Theta = 602 \pm 13^\circ \text{K}$ was obtained from it. The quite high characteristic temperature

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KULESHOV, I.M.; SADIKOV, G.C.; SOKOLOVA, Z.A.

Neutronographic study of high temperature beryllium oxide.
Zhur. fiz. khim. 36 no.6:1369-1371 Je'62 (MIRA 17:7)

1. Institut fizicheskoy khimii AN SSSR.

SADIKOV, G.G.; SHISHAKOV, N.A.

X-ray and neutron diffraction study of sodium tungstate. *Izv. AN SSSR.*
Ser. khim. no.7:1277-1278 '65. (MIRA 18:7)

1. Institut fizicheskoy khimii AN SSSR.

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S/062/61/000/011/012/012
B103/B147

15.2240

AUTHORS: Gorbunov, N. S., Shishakov, N. A., Sadikov, G. G., and Babad-Zakhryapin, A. A.

TITLE: Neutron-diffraction study of titanium carbide and nitride

PERIODICAL: Akademiya nauk SSSR. Izvestiya. Otdeleniye khimicheskikh nauk, no. 11, 1961, 2093 - 2095

TEXT: The composition of (a) titanium carbide, and (b) titanium nitride was studied at the beginning and the end of their homogeneity ranges. The neutron-diffraction pictures were taken with a remote-control neutron diffractometer (R. P. Ozerov, S. V. Kiselev et al. Kristallografiya 5, No. 2 (1960)). It was positioned on one of the horizontal channels of the ИРТ-1000 (IRT-1000) reactor of the Institut atomnoy energii Akademii nauk SSSR (Institute of Atomic Energy of the Academy of Sciences USSR). The wavelength of the neutrons which were monochromatized by reflection from the (111) plane of a lead single crystal, was 1.06 Å. The neutrons scattered by the specimen were recorded automatically by means of an ЭПП-09 (EPP-09) in dependence on the dispersion angle. The relation of
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Neutron-diffraction study of...

the intensities of the individual reflexes (Table) was determined from the relation of the areas below the integral curve of the count intensity with deduction of the background. Fig. 1 shows the neutron-diffraction pictures. They show only the reflexes satisfying the extinction condition for a face-centered cubic lattice. In such a way, the x-ray data on the symmetry of the unit cell of the compounds studied were confirmed by neutron-diffraction data. The absence of superstructure reflexes proves that the nonmetal atoms are distributed statistically in these compounds. The calculated intensity values were found on the

basis of the equation: $I_{calc} \approx F^2 p (1/\sin^2 \theta \cos \theta) A(\theta)$, where F is a structure factor; p is the recurrence factor; and $A(\theta)$ is the absorption factor. In the present case, $A(\theta)$ depends only slightly on the angle θ and was thus not taken into account. It has been found that the calculated intensity values of TiC , $TiC_{0.25}$, and $Ti_{0.85}N$ are in good agreement with the experimental data. In $TiC_{0.25}$ the composition of which is almost stoichiometric, the Ti atoms occupy all possible vacancies. Actually, the nonmetal atoms are in titanium carbide and

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Neutron-diffraction study of...

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B103/B147

nitride in the octahedral holes. These holes are occupied statistically in titanium carbide which shows a deficiency of carbon. In titanium nitride, the lattice is deficient as to titanium. There are 1 figure, 1 table, and 8 references: 4 Soviet and 4 non-Soviet. The two references to English-language publications read as follows: J. Bacon, Difraktsiya neytronov (Neutron diffraction), IL, M., 1957. Tekhnika vysokikh temperatur (High-temperature Engineering), edited by I. E. Campbell, IL, M., 1959.

ASSOCIATION: Institut fizicheskoy khimii Akademii nauk SSSR (Institute of Physical Chemistry of the Academy of Sciences USSR)

SUBMITTED: May 25, 1961

Table Experimental and calculated reflex intensities for titanium carbide and nitride.

Legend: (1) titanium nitride; (2) titanium carbide; (3) I_{exp} ; (4) I_{calc} for $Ti_{0.85}N$; (5) I_{calc} for TiC.

Card 3/103

KUKHARKOVA, L.L., starshiy nauchnyy sotrudnik; LAVROVA, L.P., kand.
tekh. nauk; SOLOV'YEV, V.I., kand. khim. nauk; FREYDLIN, Ye.M.,
kand. veter. nauk; PEROVA, P.V., kand. veter. nauk; SADIKOVA,
I.A., kand. biol. nauk; KRYLOVA, V.V., starshiy nauchnyy
sotrudnik; BUSHKOVA, L.A., starshiy nauchnyy sotrudnik;
RYNDINA, V.P., starshiy nauchnyy sotrudnik

Directed use of microorganisms for the improvement of the
quality of sausage products. Report No. 2. Trudy VNIIMP no.16:
76-109 '64. (MIRA 18:11)

SHARKOVSKIY, I.A., professor; SADIKOV, I.F., vrach; MURAV'YEVA, K.A.,
vrach; IL'INA, A.A.; TROITSKAYA, O.A.

Control of ocular trauma in machine shops. Vest. oft. 33 no.3:
3-5 My-Je '54. (MLRA 7:6)

(EYE, wounds and injuries,

*prev. in machine shop workers)

(WOUNDS AND INJURIES,

*eye, prev. in machine shop workers)

(OCCUPATIONAL DISEASE,

*eye inj. in machine shop workers)

SADIKOV, I. N.

SADIKOV, I. N.; FIALKOV, M. A.; KURAKOZOVA, N. Sh., red.; SOKOLOVA, N. N.,
tekh. red.

[Ensuring the safety of socialist property in state commerce]
Obespechenie sokhranosti sotsialisticheskoi sobstvennosti v
gosudarstvennoi trgovle. Izd. 2-oe, perer. i dop. Moskva,
Gos. izd-vo torg.lit-ry, 1957. 106 p. (MIRA 11:2)
(Commerce)

ALIPOV, V.N.; SADIKOV, I.N.; FIALKOV, M.A.; ISKOVA, A.K., red.; BABICHEVA,
V.V., tekhn.rsd.

[Transportation and the delivery of goods; collection of
regulations] Transport i perevozki v trgovle; sbornik nor-
mativnykh materialov. Moskva, Gos.izd-vo tog.lit-ry, 1959.
621 p. (MIRA 12:12)

(Delivery of goods (Law))

S/658/61/000/007/007/010
D251/D302

AUTHOR: Sadikov, I.N.

TITLE: The flow of a viscous liquid between two parallel oscillating plates

SOURCE: Moscow. Fiziko-tekhnicheskiy institut. Trudy, no. 7, 1961. Issledovaniya po mekhanike i prikladnoy matematike, 124 - 135

TEXT: The author considers the non-stationary flow of an incompressible viscous liquid between the plates of a compressor. The plates are considered infinite, hence the Nav'ye Stokes equations simplify to

$$\rho \frac{\partial u}{\partial t} = - \frac{\partial p}{\partial x} + \mu \left(\frac{\partial^2 u}{\partial y^2} + \frac{\partial^2 u}{\partial z^2} \right) \quad (5)$$

[Abstractor's note: Symbols not explained]. By considering the arbitrary pressure gradient between plane walls in the liquid

Card 1/5

The flow of a viscous liquid between ... S/658/61/000/007/007/010
 D251/D302

$$-\frac{1}{\rho} \frac{\partial p}{\partial x} = q(t), \quad (7)$$

(5) is obtained in the form

$$\frac{\partial u}{\partial t} = q(t) + \nu \frac{\partial^2 u}{\partial y^2} \quad (8)$$

and hence, by means of a Laplace transform

$$U''(y, s) - \frac{s}{\nu} U(y, s) + \frac{1}{\nu} u(y, 0) + \frac{1}{\nu} Q(s) = 0. \quad (9)$$

Applying the boundary conditions (it being assumed that the initial condition is in the form of a second degree polynomial), the solution

$$U(y, s) = \frac{1}{s}(cy^2 + ey + g) + \frac{2c\nu}{s^2} + \frac{1}{s}Q(s) +$$

$$+ \left\{ \Phi(s) - \frac{1}{s}[ch^2 + g + Q(s)] - \frac{2c\nu}{s^2} \right\} \frac{\text{ch} \sqrt{\frac{s}{\nu}} y}{\text{ch} \sqrt{\frac{s}{\nu}} h} + \quad (11)$$

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The flow of a viscous liquid between ... S/658/61/000/007/007/010
D251/D302

$$+ \left[F(s) - \frac{ch}{s} \right] \frac{\text{sh} \sqrt{\frac{s}{\nu}} y}{\text{sh} \sqrt{\frac{s}{\nu}} h} \quad (11)$$

is obtained. The use of dimensionless parameters to obtain a solution is considered. In the case of plates oscillating with frequency ω and variable pressure gradient the boundary conditions are

- 1) $u(y, 0) = 0$;
- 2) $u(h, t) = (U_0 + V_0) \sin \omega t$;
- 3) $u(-h, t) = (U_0 - V_0) \sin \omega t$;
- 4) $q(t) = 0$,

and hence the similarity criterion

$$\frac{u(y, t)}{U_0} = \frac{1}{2l} \left[\frac{\text{ch}(\sqrt{i\beta} y/h)}{\text{ch}(\sqrt{i\beta} l)} e^{i\beta t} - \frac{\text{ch}(l\sqrt{i\beta} y/h)}{\text{ch}(l\sqrt{i\beta} l)} e^{-i\beta t} \right] + \quad (14')$$

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The flow of a viscous liquid between ... S/658/61/000/007/007/010
 D251/D302

$$+ 2 \sum_{n=1}^{\infty} \frac{(-1)^{n+1} \beta \mu_n \cos(\mu_n y/h)}{\mu_n^4 + \beta^2} e^{-\mu_n^2/\alpha}; \quad (14')$$

$$\frac{u(y, t)}{V_0} = \frac{1}{2i} \left[\frac{\text{sh}(\sqrt{i\beta} y/h)}{\text{sh}(\sqrt{i\beta} h)} e^{i\beta/\alpha} - \frac{\text{sh}(t\sqrt{i\beta} y/h)}{\text{sh}(t\sqrt{i\beta} h)} e^{-i\beta/\alpha} \right] + \quad (14'')$$

$$+ 2 \sum_{n=1}^{\infty} \frac{(-1)^{n+1} \beta \mu_n \sin(\mu_n y/h)}{\mu_n^4 + \beta^2} e^{-\frac{\mu_n^2}{\alpha}}$$

are deduced, where y/h , $\alpha = h^2/\nu t$, $\beta = h^2/\nu \tau$, are dimensionless parameters; (τ is the interval of time, h the semi-distance between the plates). The smaller the value of α the swifter the establishment of oscillations in the fluid and vice versa. By considering the case $\alpha \rightarrow 0$, the relationship

$$u(y, t) = A(\beta, y/h) \sin \left[\frac{\beta}{\alpha} - \varphi(\beta, y/h) \right] \quad (16)$$

is established, where $A(\beta, y/h)$ is the amplitude of oscillations and $\beta/\alpha - \varphi(\beta, y/h)$ is the phase of oscillations. The case of non-moving plates and variable pressure gradient is considered. Calculations

Card 4/5

The flow of a viscous liquid between ... S/658/61/000/007/007/010
D251/D302

lations are carried out for various values of β and intery ted gra=
phically. There are 7 figures and 2 Soviet-bloc references.

Card 5/5

15575
S/658/62/000/009/004/013
A059/A126

26 2112

AUTHOR: Sadikov, I.N.

TITLE: The separation of the boundary layer in the nonsteady flow of a viscous incompressible liquid

SOURCE: Moscow. Fiziko-tehnicheskiye institut. Trudy. no. 9, 1962. Issledovaniya po mekhanike i prikladnoy matematike. 27 - 53

TEXT: The boundary-layer separation has been studied on the example of flow in the blade tunnel of the power gear or in the distributor tunnel of the axial-compressor stage. By "separation" of the boundary layer, return flow near the wall is understood. A variety of exact solutions of the Navier-Stokes equations was obtained for the case of nonsteady flow of a viscous liquid in a flat tunnel which can be used to show the main criteria of the similarity determining the emergence and the disappearance of boundary-layer separation in the given example. When the pressure gradient is momentarily changed, the dimensionless onset time of separation is clearly defined by the velocity distribution at the moment of onset P_0 , and the value of the pressure gradient P_1 , acting at that mo-

Card 1/3

S/658/62/000/000/004/013
A059/A126

The separation of the boundary layer in the

ly with a pressure drop of not much more than the critical values. The phase lag of the velocity of flow due to pressure forces is $\pi/2$ beyond the layer near the wall, and $\pi/4$ in the close proximity of the wall. When an alternating pressure gradient resulting from the superposition of two harmonic vibrations with different frequencies acts on tunnel flow, the alternating constituent of the particle-flow velocities is shown not to be a periodic function, and not only the amplitude, but also the vibration frequency changes at a given point. The onset and the disappearance of separation are shown to be an aperiodic process, too. There are 20 figures.

Card 3/3

SADIKOV, I.N.

Some exact solutions to the energy equation for a plane-parallel flow
of a viscous incompressible fluid. Inzh. -fiz. zhur. 5 no.10:3-8
0 '62. (MIRA 15:12)

1. Gosudarstvennyy universitet imeni Lomonosova, Moskva.
(Heat-Conduction) (Fluid dynamics)

L 13153-63

EPA(b)/EWT(1)/T-2/BDS

AFFTC/ASD Pd-4

S/170/63/000/004/006/017

57

AUTHOR: Sadikov, I. N.

TITLE: Exact solutions of an energy equation for flow of a viscous incompressible fluid in tubes

PERIODICAL: Inzhenerno-fizicheskiy zhurnal, v. 6, no. 4, 1963, 40-45

TEXT: The author has derived energy equations for studying liquid flow in place tubes and in circular tubes. He shows that non-uniformity of temperature distribution was evoked by instantaneous and periodical change in wall temperature. A similar problem for transient flow in a plane tube in case of instantaneous change in wall temperature is solved approximately only for Pr much greater than 1 and Pr much less than 1.

SUBMITTED: Sep 15, 62

ENCL: 04

Card 1/1

SADIKOV, I.N.

Heat transfer at the inlet sections of plane and rectangular channels.
Inzh.-fiz. zhur. 7 no.9:44-51 S '64. (MIRA 17:12)

L 10423-65 EWT(1)/EPF(c)/EPF(n)-2/EPR/T/EPA(bb)-2/EWA(1) Pr-h/Ps-h/Pu-h
 BSD/SSD/AFETR/ASD(f)-2/AS(mp)-2/ASD(d)/AFWL/AEDG(a) WW S/0170/64/000/009/0044/0051
 ACCESSION NR: APL047440

AUTHOR: Sadikov, I. N.

TITLE: Heat transfer in the entrance region of flat and rectangular passages

SOURCE: Inzhenerno-fizicheskiy zhurnal, no. 9, 1964, 44-51

TOPIC TAGS: heat transfer, laminar flow

ABSTRACT: Based on the linearized energy equation, the heat transfer during laminar flow in the entrance region of plane and rectangular passages with variable wall heat flux and temperature is analyzed theoretically. Using the Blasius boundary layer solution (which holds for the temperature field if $Pr = 1$) to evaluate the convective terms in the energy equation, it is shown that these terms remain almost constant so that the energy equation becomes

$$\epsilon Pe \frac{\partial \theta}{\partial \xi} = \frac{\partial^2 \theta}{\partial \eta^2}$$

in dimensionless form (where ϵ = proportionality constant, $\xi = x/h$, $\eta = y/h$). This equation is solved using the methods described by A. V. Lykov (Teoriya teploprovodnosti. GITTL, 1952) to obtain the temperature distribution and Nusselt number along the axis. For the case of uniform entrance flow at T_0 and U and a

Card 1/4

L 10423-65

ACCESSION NR: AP4047440

linear wall temperature decrease, the equations become:

$$\theta = 1 - \operatorname{erfc} \left(\frac{1-\eta}{2} \sqrt{\frac{s Pe}{\xi}} \right) - 4\theta' \operatorname{erfc} \left(\frac{1-\eta}{2} \sqrt{\frac{s Pe}{\xi}} \right),$$

$$\operatorname{Nu}_x = \frac{\sqrt{\frac{s Pe}{\pi t}} + 2\theta' \sqrt{\frac{s Pe t}{\pi}}}{1 - 2\sqrt{\frac{\xi}{\pi s Pe}} + \theta' \left(1 - \frac{4}{3} \sqrt{\frac{\xi}{\pi s Pe}} \right)}$$

If the wall temperature is determined by the local heat transfer, the equations become:

$$\theta = 2K_0 \sqrt{\frac{\xi}{s Pe}} \operatorname{erfc} \left(\frac{1-\eta}{2} \sqrt{\frac{s Pe}{\xi}} \right) + 4K_1 \xi \sqrt{\frac{\xi}{s Pe}} \operatorname{erfc} \left(\frac{1-\eta}{2} \sqrt{\frac{s Pe}{\xi}} \right),$$

$$\operatorname{Nu}_x = (K_0 + K_1 \xi) \left(2K_0 \sqrt{\frac{\xi}{\pi s Pe}} + \frac{4}{3} K_1 \xi \sqrt{\frac{\xi}{\pi s Pe}} \right) \left(\frac{K_0 \xi}{s Pe} - \frac{K_1 \xi^2}{s Pe} \right)^{-1}$$

Card 2/4

L 10423-65

ACCESSION NR: AP4047440

For a rectangular passage at a constant temperature T, the equations become:

$$\theta = \operatorname{erf}\left(\frac{1-\eta}{2}\sqrt{\frac{sPe}{\xi}}\right) \operatorname{erf}\left(\frac{\beta-\zeta}{2}\sqrt{\frac{sPe}{\xi}}\right)$$

$$\operatorname{Nu}|_{\eta=1} = \left[\beta \sqrt{\frac{sPe}{\pi\xi}} \operatorname{erf}\left(\frac{\beta-\zeta}{2}\sqrt{\frac{sPe}{\xi}}\right) \right] \times \left[\int_0^1 \int_0^1 \operatorname{erf}\left(\frac{1-\eta}{2}\sqrt{\frac{sPe}{\xi}}\right) \operatorname{erf}\left(\frac{\beta-\zeta}{2}\sqrt{\frac{sPe}{\xi}}\right) d\zeta d\eta \right]$$

$$\operatorname{Nu}|_{\zeta=1} = \left[\beta \sqrt{\frac{sPe}{\pi\xi}} \operatorname{erf}\left(\frac{1-\eta}{2}\sqrt{\frac{sPe}{\xi}}\right) \right] \times$$

$$\left[\int_0^1 \int_0^1 \operatorname{erf}\left(\frac{1-\eta}{2}\sqrt{\frac{sPe}{\xi}}\right) \operatorname{erf}\left(\frac{\beta-\zeta}{2}\sqrt{\frac{sPe}{\xi}}\right) d\zeta d\eta \right]$$

These equations hold for $Pe \gg 10^4$ and $\xi \leq 50$. Orig. art. has: 4 figures, 1 table, and 20 formulas.

ASSOCIATION: none

Card 3/4

L 10423-65

ACCESSION NR: APL047440

SUBMITTED: 12Sep63

SUB CODE: TD

NO REF SOV: 001

ENCL: 00

OTHER: 001

Card 4/4

L 43175-65 EWP(m)/EPF(c)/EPF(n)-2/EPR/EWT(1)/FCS(k)/EWG(m)/EWA(d)/EWA(1) Pd-1/
 Pr-4/Ps-4/Pu-4 WW UR/0170/65/008/003/0283/0289
 ACCESSION NR: AP5009764 60
 B

AUTHOR: Sadikov, I. N.

TITLE: Laminar heat transfer in a plane channel with a nonequilibrium temperature field at inlet

SOURCE: Inzhenerno-fizicheskiy zhurnal, v. 8, no. 3, 1965, 283-289

TOPIC TAGS: heat transfer, laminar flow, temperature distribution, Nusselt number, Reynolds number, boundary layer

ABSTRACT: A theoretical analysis was made of the heat transfer to the walls of the entrance section of a plane duct in laminar flow. The flow is assumed incompressible and with constant parameters λ and ρ . In the energy equation the term $v \partial T / \partial y$ is negligible in comparison to $u \partial T / \partial x$ when $u = v_0$. In nondimensional form the energy equation becomes $Pe \frac{\partial \theta}{\partial \xi} = \frac{\partial^2 \theta}{\partial \eta^2}$, where $Pe = v_0 h / a$ and $\epsilon = 0.546 Pr^{-1/3}$. The initial and boundary conditions become respectively $T_w = T_s + b\eta + c\eta^2$ and $\eta = \pm 1, \theta = -\theta_s$. The temperature distribution is obtained by using Laplace transforms. At the upper wall the resulting Nusselt number becomes

Card 1/3

L 43175-65

ACCESSION NR: AP5009764

0

$$Nu|_{y=1} = \frac{\beta + 2\gamma + \sqrt{\frac{\epsilon Pe}{\pi \xi} \left(1 - \gamma - \beta + 2\theta \xi - \frac{4\gamma \xi}{\epsilon Pe} \right)}}{1 - \frac{\gamma}{3} + \theta \xi - \frac{2\gamma \xi}{\epsilon Pe} + 2 \sqrt{\frac{\xi}{\pi \epsilon Pe} \left[\frac{2}{3} \xi \left(\frac{2\gamma}{\epsilon Pe} - \theta \right) + \gamma - 1 \right]}}$$

Increasing γ causes a

decrease in Nu at the upper wall and an increase at the lower wall. Using a boundary condition $y = \pm h$, $\frac{\partial T}{\partial y} = \pm \frac{q_0}{\lambda} \pm \frac{q_1 \xi}{\lambda h}$, leads to a Nusselt number

$$Nu|_{y=1} = A/B,$$

$$A = K_0 + K_1 \xi,$$

$$B = 2(K_0 - 2\gamma_0) \sqrt{\frac{\xi}{\pi \epsilon Pe}} + 0.75 \frac{K_1 \xi^{3/2}}{\sqrt{\epsilon Pe}} - 2\beta_0 \sqrt{\frac{\xi}{\epsilon Pe}} -$$

$$- \frac{1}{\epsilon Pe} (K_0 \xi + K_1 \xi^2 - 2\gamma_0 \xi) + \beta_0 + \frac{2}{3} \gamma_0.$$

It is shown that the lower the

parameters γ and β the larger is the magnitude of the Nusselt number in the positive part of the solution. In all, an increased temperature at the center of the flow in the channel inlet improves the heat transfer characteristics to the wall

Card 2/3

L 43175-65

ACCESSION NR: AP5009764

over that obtained in a uniform and somewhat lower temperature-distribution flow.
Orig. art. has: 18 equations and 3 figures.

ASSOCIATION: none

SUBMITTED: 18Feb64

NO REF SOV: 003

ENCL: 00

OTHER: 001

SUB CODE: ME, TD

Card 3/3 CC

I 44310-65 EWP(m)/EWT(1)/EPP(c)/EPP(n)-2/EPR/FCS(k)/EWG(m)/EWA(d)/EWA(1) Pd-1/
Pr-4/Ps-4/Pu-4 WW

ACCESSION NR: AP5010066

UR/0170/65/008/004/0423/0429

AUTHOR: Sadikov, I. N.

44
B

TITLE: Laminar heat transfer ²¹ in the entrance section of a rectangular channel

SOURCE: Inzhenerno-fizicheskij zhurnal, v. 8, no. 4, 1965, 423-429

TOPIC TAGS: laminar flow, heat transfer, Reynolds number, temperature field, Nusselt number, convective heat transfer

ABSTRACT: The heat transfer in laminar flow in the entrance section of a rectangular channel was investigated analytically. The energy equation is linearized by neglecting the transverse convective term, or,

$$\epsilon U \frac{\partial T}{\partial x} = a \left(\frac{\partial^2 T}{\partial y^2} + \frac{\partial^2 T}{\partial z^2} \right)$$

where the transverse correction term ϵ is given by

$$\epsilon = 0,346 Pr^{-\frac{1}{3}}$$

Card 1/2

L 44310-65

ACCESSION NR: AP5010066

The energy equation is then nondimensionalized and divided into two solutions

$$\begin{aligned} \xi=0, \theta_\eta &= \beta_\eta \eta + \gamma_\eta \eta^2, \\ \text{Pe} \frac{\partial \theta_\eta}{\partial \xi} &= \frac{\partial^2 \theta_\eta}{\partial \eta^2}, & \eta = \pm 1, \frac{\partial \theta_\eta}{\partial \eta} &= \pm K_{0\eta} \pm K_{1\eta} \xi; \\ \zeta=0, \theta_\zeta &= \beta_\zeta \zeta + \gamma_\zeta \zeta^2, \\ \text{Pe} \frac{\partial \theta_\zeta}{\partial \xi} &= \frac{\partial^2 \theta_\zeta}{\partial \zeta^2}, & \zeta = \pm \zeta_0, \frac{\partial \theta_\zeta}{\partial \zeta} &= \pm K_{0\zeta} \pm K_{1\zeta} \xi. \end{aligned}$$

where the dimensionless coordinator ξ, η, ζ correspond to x, y, z , respectively. Expressions are obtained for the heat transfer rate and the temperature distribution in the channel. The results are depicted graphically, for example, see Fig. 1 on the Enclosure. It is found that the extent of the elevated temperature region is the same in both the short as well as in the long section of the channel. Orig. art. has: 15 equations and 4 figures.

ASSOCIATION: none

SUBMITTED: 29Feb64

ENCL: 01

SUB CODE: TD, MB

NO REF SOV: 009

OTHER: 003

Card 2/3

39117
S/120/62/000/003/006/048
E032/E114

AUTHORS: Zhezherun, I.F., Sadikov, I.P., and Chernyshov, A.A.

TITLE: A pulsed detector of 0.5 eV resonance neutrons

PERIODICAL: Pribory i tekhnika eksperimenta, no.3, 1962, 43-47

TEXT: The detector was designed for measuring the spatial distribution of slowing-down neutrons. It is basically a plutonium ionization chamber located inside a samarium-gadolinium filter and is shown in Fig.1. The Ni collector carries a layer of $PuO_2 \cdot H_2O$ (0.3-0.5 mg/cm²). The chamber is filled with argon + 5-10% CO₂ at a total pressure of 1 atm. In the absence of filters the efficiency to 0.5 eV neutrons was 1.5 and 3% for total amounts of plutonium of 1.8 and 3.6 mg, respectively. The construction of the filters is indicated in Fig.3; mixtures of samarium and gadolinium oxides were employed. There are 6 figures.

ASSOCIATION: Institut atomnoy energii AN SSSR
(Institute of Atomic Energy AS USSR)

SUBMITTED: November 9, 1961

~~Card 1/5~~

ZHEZHERUN, I.F.; SADIKOV, I.P.; CHERNYSHOV, A.A.

Effect of the temperature and microstructure of sintered
beryllium oxide on the scattering cross section of thermal
neutrons. Atom. energ. 13 no.3:250-257 S '62. (MIRA 15:9)
(Beryllium oxide) (Neutrons—Scattering)

ZHEZHERUH, I.F.; SADIKOV, I.P.; TARABAN'KO, V.A.; CHERNYSHOV, A.A.

Measuring the length of fission neutron moderation in sintered
beryllium oxide at energies up to 1.44 and 0.3 ev. Atom. energ.
13 no.3:258-264 S '62. (MIRA 15:9)
(Beryllium oxide) (Neutrons)

ACCESSION NR: AP4006630

S/0089/63/015/006/0485/0489

AUTHOR: Zhezherun, I. F.; Sadikov, I. P.; Taraban'ko, V. A.; Cherny*shov, A. A.

TITLE: Fission neutron multiplication in beryllium

SOURCE: Atomnaya energiya, v. 15, no. 6, 1963, 485-489

TOPIC TAGS: beryllium, neutron multiplication, multiplication factor, nuclear reactor, reactor theory, reactor physics, neutron moderator

ABSTRACT: The multiplication factor in beryllium has been measured by the method of spherical geometry. An enriched (96% U^{235}) UH_3O_8 powder, enclosed in a thin-walled semispherical container used as the fission-neutron source (converter), was irradiated by a thermal-neutron beam from a reactor. The relative increase of the power of the fission-neutron source surrounded by a spherical layer of beryllium was measured. The neutron detectors were located 80 cm from the source and could be shifted around it in a horizontal plane. Measurements were made of the total counting rate for five beryllium and five graphite spheres. The multiplication factor (see Fig. 1 of Enclosure)

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ACCESSION NR: AP4006630

was calculated as a ratio of the average energy of neutrons passed through spherical layers of beryllium and graphite:

$$K_{Be} = \frac{N_{Be}(\bar{E})}{N_C(\bar{E})}$$

The maximum value for the multiplication factor (1.10 ± 0.015) was obtained at 12—15-g/cm² thickness of the spherical layer of beryllium. The multiplication factor obtained corresponds to that of the beryllium of reactors in which the inelastic moderation by uranium nuclei can be disregarded (e.g., in homogeneous thermal-neutron reactors with enriched uranium). Orig. art. has 4 figures, 2 tables, and 4 formulas.

ASSOCIATION: none

Card 2/AA

L 40828-65 EPA(s)-2/EWT(m)/EPF(c)/EPF(n)-2/EWG(m)/EPR/EWP(j) Pc-4/Pr-4/Ps-4/
Pu-4 RM/GS
ACCESSION NR: AT5007911 S/0000/64/000/000/0211/0235 40
BT-1

AUTHOR: Mostovoy, V. I.; Sadikov, I. P.; Chernyshov, A. A.; Yeremeyev, I. P.

TITLE: Scattering of slow monochromatic neutrons on monoisopropylbiphenyl at 17 + or -2C

SOURCE: Moscow. Institut atomnoy energii. Issledovaniya po primeneniyu organicheskikh teplonositeley-zamedliteley v energeticheskikh reaktorakh (Research on the use of organic heat-transfer agents and moderators in power reactors). Moscow, Atomizdat, 1964, 211-235

TOPIC TAGS: organic reactor coolant, nuclear power plant, thermal reactor, power reactor, monochromatic neutron, organic moderator, neutron scattering, isopropylbiphenyl

ABSTRACT: The results of measurements of the cross sections of inelastic scattering of neutrons on monoisopropylbiphenyl at room temperature are presented. The purpose of this investigation was to determine the thermalizing properties of monoisopropylbiphenyl and to compare them with the thermalizing properties of water. The results are given in the form of graphs which represent the ratio of the second derivative of the cross section to the total scattering cross sections of free atoms, which are molecules of monoisopropylbiphenyl. In addition, the

Card 1/2

L 40828-65

ACCESSION NR: AT5007911

mean characteristics of neutron scattering on monoisopropylbiphenyl are also calculated. It is shown that the general character of scattering on monoisopropylbiphenyl is similar to that of scattering on water. The thermalizing capacity of monoisopropylbiphenyl, however, is less than that of water. The mean cosine for monoisopropylbiphenyl is also shown to lie considerably below that of water. The authors conclude by calculating the generalized frequency spectrum, which is also shown in a graph. On the whole, the energy of the generalized spectrum in monoisopropylbiphenyl is less than that in water. Orig. art. has: 44 figures, 2 tables and 4 formulas.

ASSOCIATION: None

SUBMITTED: 01Aug64

ENCL: 00

SUB CODE: NP

NO REF SOV: 001

OTHER: 013

cc
Card 2/2

KAZARNOVSKIY, M.V.; POPOV, Yu.P.; SADIKOV, I.E.

Research with the aid of pulsed neutrons. Atom. energ. 19 no.4:
408-410 Q '65. (MIFA 18:11)

KAZARNOVSKIY, M.V., kand. fiz.-matem. nauk; SADIKOV, I.P.; POPOV, Yu.P.

Symposium on explorations by the use of pulsed neutrons held
in the Federal Republic of Germany. Vest. AN SSSR 35 no.9:
93 '65. (MIRA 18:9)

L 04674-67 EWT(m)

SOURCE CODE: UR/0089/66/020/005/0437/0438

ACC NR: AF6018360

Author: Yefanov, A. I.; Konstantinov, L. V.; Postnikov, V. V.; Sadikov, I. P.; Sokolov, M. P.

31
27
B

ORG: none

TITLE: Installation for oscillator measurements on a nuclear reactor

SOURCE: Atomnaya energiya, v. 20, no. 5, 1966, 437-438

TOPIC TAGS: nuclear reactor control equipment, reactor transient, nuclear reactor characteristic

ABSTRACT: The authors report an oscillator installation, intended for physical re-activity measurements in the reactor of the first block of the Balovarsk Atomic Energy Station im. I. V. Kurchatov. This installation, used in conjunction with the permanent manual-control system and with an ionization chamber, was employed to measure the differential and integral efficiencies of manual-control rods, under different operating conditions, and also to determine the frequency characteristics of the reactor. The installation could be joined by means of the relay system to the drive of any of the manual-control rods, so that it was very useful for large scale measurements of the efficiency of a large number of rods within 1 - 1.5 hours without disturbing the normal operation of the reactor. The apparatus consists of an oscillation generator and a harmonic analyzer (Fig. 1). The oscillation generator contains a frequency divider and a two-position relay controlled by the output pulse of the frequency di-

UDC: 621.039.5 16.2: 621.039.564

Card 1/2

L 39776-66 EHT(m)/ENP(t)/ETI IJP(e) WW/JD/GD-2/JG
ACC NR: AT6012689

SOURCE CODE: UR/3136/65/000/977/0001/0016

AUTHOR: Ishmayev, S. N.; Mostovoy, V. I.; Nozik, V. Z.; Sadikov, I. P.; Chernyshov,
A. A.; Yudevich, M. S.

ORG: State Committee on the Use of Atomic Energy SSSR, Institute of Atomic Energy
im. I. V. Kurchatov, Moscow (Gosudarstvennyy komitet po ispol'zovaniyu atomnoy
energii SSSR, Institut atomnoy energii)

TITLE: Study of nonstationary neutron spectra in zirconium¹⁹ hydride²¹

SOURCE: Moscow. Institut atomnoy energii. Doklady, no. 977, 1965. Izucheniye
nestatsionarnykh spektrov neytronov v gidride tsirkoniya, 1-16

TOPIC TAGS: neutron spectrum, zirconium compound, hydride, nuclear reactor
moderator, scattering cross section

ABSTRACT: This is a continuation of earlier work (Report at the Symposium on
Investigations with Pulsed Neutron Sources, Karlsruhe, 1965) dealing with the non-
stationary spectra of $ZrH_{1.88}$ systems of different dimensions in a wide range of
moderation times. In the present paper the experimental results are compared with
calculations based on the use of double-differential cross sections calculated
from the spectrum of the normal oscillations of the hydrogen atoms in a zirconium

Card 1/2

Card 2/2 M/LP

SHARAPOV, Yu.I.; SADIKOV, L.A., red.

[Elements and networks of electronic digital computers]
Elementy i uzly elektronnykh tsifrovyykh vychislitel'nykh
mashin. Moskva, TsNIIPI, 1964. 38 p. (MIRA 18:3)

SADIKOV, M.A.

Results in determining the mineralization of formation waters
in the northeastern part of the West Siberian Plain based on
resistivity logging data. Trudy SNIIGGIMS no.17:185-191
'61. (MIRA 15:9)
(Yenisey Valley--Water, Underground--Analysis)

KONTOROVICH, A.E.; REZAPOV, A.N.; SADIKOV, M.A.

Some geochemical characteristics of Mesozoic sediments in the north-
western part of the West Siberian Plain. Trudy Inst.geol.i geofiz.Sib.
otd.AN SSSR no.20:85-101 '63. (MIRA 17:10)

KONTOROVICH, A.E.; SADIKOV, M.A.; SHVARTSEV, S.L.

Distribution of some chemical elements in surface and subsoil
waters of the northwestern part of the Siberian Platform.
Dokl.AN SSSR 149 no.1:179-180 Mr '63. (MIRA 16:2)

1. Sibirskiy nauchno-issledovatel'skiy institut geologii,
geofiziki i mineral'nogo syr'ya. Predstavleno akademikom
N.M.Strakhovym.

(Siberian Platform—Chemicals)
(Siberian Platform—Water—Analysis)

SADIKOV, N., NECHAYEVA, G., SKVORTSOV, V.

See Sadikov, N. V. in Bulletin
"Restoration of the Amino-Acid Composition of Cerebral Albumins
in Various Functional States". Paper submitted at 2nd Conference on
Biochemistry of the Nervous System, AS USSR, 12-16 Feb 1957, Kiev

Translation 1122802

SADIKOV, O.N.

Bails of tramway tracks. Put' 1 put. khoz. 9 no. 7145 '65.
(MIRA 18-10)

1. Nachal'nik proizvodstvenno-tekhnicheskogo otdela sluzhby
puti Tramvaynogo upravleniya g. Leningrada.

SADIKOV, P. P.

PA 162T2

USSR/Academy of Sciences - Book, Mining Jul 50

"Review of Book, 'Essence of the Unit Technological Process in Railroad Transportation and Its Procedure and Execution,'" P. P. Sadikov

"Iz Ak Nauk SSSR, Otdel Tekh Nauk" No 7, pp 1099-1101

Reviews subject book by Acad V. N. Obratsov, D. P. Marek, S. P. Nadezhin, V. A. Sokovich, and F. I. Shaul'skiy. States more than 80% of all freight is carried by trains.

162T2

LEBEDEVA, T.P., inzhener; RUDAKOVA, Yu.I., inzhener; SADIKOV, P.P., kandidat
tekhnicheskikh nauk.

Improving the technology of operating marshalling yards on the basis
of advanced experience. Zhel.dor.transp. 37 no.11:41-44 N 155.
(Railroads--Switching) (MIRA 9:2)

SADIKOV, P.P.; ANAN'YEVA, S.A.; LEBEDEVA, T.P.; SMIRNOV, Ye.K.; PRIGOROVSKIY,
V.F., inzh., red.; TISHKOV, L.B.; KATOLICHENKO, V.A.; PANIN, A.V.;
NOSKOV, Yu.A.; TRIFONOVA, M.G.; KLEYMENOV, Ye.I.; BOBROVA, Ye.N.,
tekh. red.

[Technical equipment for large general-purpose freight yards]
Tekhnicheskoe osnashchenie krupnykh gruzovykh stantsii obshchego
pol'zovaniia. Moskva, Gos.transp.zhel-dor izd-vo. 1958. 186 p.
(Moscow. Moskovskii institut inzhenerov zheleznodorozhnogo
transporta. Trudy, no.161) (MIRA 12:2)
(Railroads--Yards--Equipment and supplies)

SADIKOV, P.P., kand. tekhn. nauk; LEBEDEVA, T.P., kand. tekhn. nauk.

Effective plans for track expansion at large freight yards in
general use. Vest. TSNII MPS 17 no.1:18-22 F '58. (MIRA 11:3)
(Railroads--Switching)

SADIKOV, P.P.; LEBEDEVVA, T.P.; KURSH, V.B.; BELENOV, V.K.; PETRUNENKOV, A.Ya.;
PISHKOV, L.B.; ASHIKHMIN, A.K., inzh. retsenzent; PREDE, V.Yu.,
inzh., red.; VOROTNIKOVA, L.F., tekhn.red.

[Technological equipment of railroad stations] Tekhnicheskoe
osnashchenie stantsii. Moskva, Transzheldorizdat, 1963. (MIRA 16:6)
153 p.

(Railroads--Stations)
(Railroads--Equipment and supplies)

LEBEDEVA, T.P.; STRAKOVSKIY, I.I.; TISHKOV, L.B.; LOMAKINA, N.N.;
ZABELLO, M.L.; SADIKOV, P.P.; PETRUNENKOV, A.Ye.; BELENOV, V.K.;
ARUTYUNOV, V.A., inzh., retsenzent; PETROVA, V.L., inzh., red.;
BOBROVA, Ye.N., tekhn.red.

[Basic requirements related to the technical equipment of
classification yards] Osnovnye trebovaniia k tekhnicheskomu
osnashcheniiu sortiurovochnykh stantsii. Moskva, Transzheldorizdat,
1963. 218 p. (Its TRUDY, no.270). (MIRA 17:3)

SADIKOV, P.P.
SZADIKOV, P.P. [Sadikov, P.P.], a muszaki tudományok kandidátusa, fommun-
kátars

Modernization of technology in Soviet switchyards. Vasut 13 no.
12:17-18 D '63.

1. Osszszovetsegi Vasuti Tudomanyos Kutato Intezet.

GINZBURG, I.V.; LISITSINA, G.A.; SADIKOVA, A.T.; SIDORENKO, G.A.

Fayalite of granitic rocks and its alteration products (Kurama
Range, Central Asia). Trudy Min.muz. no.13:16-42 '62. (MIRA 16:2)

(Kurama Range—Fayalite)

KUKHARKOVA, L.L., starshiy nauchnyy sotrudnik; LAVROVA, L.P., kand. tekhn. nauk; SOLOV'YEV, V.I., kand. khim. nauk; FREYDLIN, Ye.M., kand. veter. nauk; PEROVA, P.V., kand. veter. nauk; SADIKOVA, I.A., kand. biol. nauk; KRYLOVA, V.V., starshiy nauchnyy sotrudnik; BUSHKOVA, L.A., starshiy nauchnyy sotrudnik; RYNDINA, V.P., starshiy nauchnyy sotrudnik; TRUDOLYUBOVA, G.B., starshiy nauchnyy sotrudnik; KARGAL'TSEV, I.I., assistent; MIKHAYLOVA, A.Ye., mladshiy nauchnyy sotrudnik; KARPOVA, V.I., mladshiy nauchnyy sotrudnik; POLETAYEV, T.N., mladshiy nauchnyy sotrudnik; MERKULOVA, V.K., mladshiy nauchnyy sotrudnik

Directed use of microorganisms for the improvement of the quality of sausage products. Report No. 1. Trudy VNIIMP no.16: 64-75 '64. (MIRA 18:11)

1. Kafedra tekhnologii Moskovskogo tekhnologicheskogo instituta myasnoy i molochnoy promyshlennosti (for Kargal'tsev).

SOLOV'YEV, V.I., kand. khim. nauk; LAVROVA, I.P., kand. tekhn. nauk;
SADIKOVA, I.A., kand. biol. nauk; KRYLOVA, V.V., starshiy
nauchnyy sotrudnik; BUSHKOVA, L.A., starshiy nauchnyy sotrudnik;
MERKULOVA, V.K., mladshiy nauchnyy sotrudnik; POLETAYEV, T.N.,
mladshiy nauchnyy sotrudnik; KARPOVA, V.P., inzh.-khimik;
MAMA YEVA, S.A., tekhnik

Studying some conditions providing for color intensity and
stability in the production of smoked and cooked sausage.
Trudy VNIIMP no.16:183-201 '64. (MIRA 18:11)

L 17145-65 EWT(m)/EPF(c)/EPR/EWP(j)/T
ACCESSION NR: AR4049277

Pc-4/Pr-4/Ps-4 WW/RM
S/0081/64/000/015/S070/S070

SOURCE: Ref. zh. Khimiya, Abs. 15S406

AUTHOR: Kochetkov, V.N., Sadikova, L.I., Ponomareva, V.A., Cherenkova, G.M.

TITLE: Regeneration of polyurethan foam wastes

CITED SOURCE: Vestn. tekhn. i ekon. inform. N.-i. in-t tekhn.-ekon. issled. Gos. kom-ta khim. i neft. prom-sti pri Gosplane SSSR, vy*p. 8, 1963, 22-23

TOPIC TAGS: polyurethan, polyurethan foam, waste regeneration

TRANSLATION: Regenerates from polyurethan foam wastes were prepared in a stainless steel cooker with a mixer, heated by ditolylmethane. A solvent, such as the polyester desmophen 2200, diethylene glycol or a mixture of the two, was poured in first and heated to 200C. Polyurethan foam wastes in the form of crumbs with a diameter of 10 mm were then added under continuous stirring at a ratio to the solvent ranging from 1:5 to 4:5, the former being recommended. The regeneration process lasted 1-9 hours in various experiments, with a 3-4 hour regeneration period being recommended. The quality of the resultant regenerate was poorer with diethylene glycol than with the polyester or a

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mixture of polyester and diethylene glycol at a ratio of 10:1 (hydroxyl numbers increased 10 fold and productivity doubled in the latter case). The yield of regenerate reached 93-99.5% of the charge of initial components. Regenerate obtained with the polyester solvent was used in quantities of 10% for the commercial production of polyurethan foam. The resultant product equalled foam produced without use of regenerate as to physical and mechanical properties. I. Kotlyarevskaya

ASSOCIATION: none

SUB CODE: OC, MT

ENCL: 00

Card 2/2

CA

10

PROCESSES AND PROPERTIES INDEX

Isolation of cyclic peptides from yeast. N. Salkova. *Compt. rend. acad. sci. U. R. S. S. 25, 308 (1930)* (in English).—By heating bakers' yeast in an autoclave to 210° during 3 hrs. with 2% Na₂CO₃ soln. and extr. of the resulting soln. with CHCl₃, there was obtained a cryst. cyclopeptide (I) which, after washing with ether and recrystn. from EtOH, formed needles m. 280-7° and having the formula C₁₁H₁₅N₃O₄. Hydrolysis of I with 37% HCl (in a sealed tube at 100° for 36 hrs.) and fractional crystn. of the Cu salts of the resulting amino acids indicated that leucine, isoleucine and isovaline were present in mol. proportions of 1:2:1. Thus I is possibly cyclolenylsolenylisovalylsolenine.

George Ayers

ASTM 55-66 METALLURGICAL LITERATURE CLASSIFICATION

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PROCESSES AND PROPERTIES INDEX

Products of Autoclave Splitting of Yeast Protein

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N. V. Sotnikova (Univ., Leningrad). *Doklady Akad. Nauk SSSR* 11, 7-12 (1940) cf. C.A. 35, 1421^g. --By the autoclave decompos. of yeast protein at 210°, cyclic tetrapeptides had previously been obtained, which were regarded as possibly preformed in the protein, since autoclaving a mixt. of pure amino acids failed to yield the cyclic substances. It has now been established that the yeast protein does not contain peptides; the cyclic tetrapeptides are formed even when the yeast protein is first hydrolyzed with HCl and then subjected to autoclaving at 210°. H. Priestley

ASD-SLA METALLURGICAL LITERATURE CLASSIFICATION

SADIKOVA, N. V.

Mbr., Albumin Lab., Biochemistry Chair, Leningrad Order Lenin State Univ. in Budnov,
-1939-47-. "Isolation of Cyclic Peptides from Yeast," Dok. AN, 25, No. 7, 1939;
" Products of Autoclave Splitting of Yeast Protein," Biokhim., 11, No. 1, 1947; "The
Characteristics of the Anhydrolytic Method of Splitting Albumin," ibid., 13, No. 3, 1948.