

NAREBSKA, Leokadia, mgr; NAREBSKI, Wojciech, dr

Complexometric analysis of Al-Zn-Mg alloys. Rudy i metale 8
no.10:398-400 '63.

NAREMSKIY, N. K.

NAREMSKIY, N. K. --"Investigation of Centrifugal Separators for Pneumatic Transport." Min Higher Education USSR. Odessa Technological Inst imeni I. V. Stalin. Odessa, 1955. (Dissertation for the Degree of Candidate in Technical Sciences)

SO: Knizhnaya Letopis', No 1, 1956

124-58-6-6876

Translation from: Referativnyy zhurnal, Mekhanika, 1958, Nr 6, p 88 (USSR)

AUTHORS: Platonov, P.N., Naremskiy, N.K.

TITLE: Investigation of the Functioning of Centrifugal Cyclone-separators
[Issledovaniye raboty tsentrobezhnykh tsiklonov-otdeliteley (raz-
gruziteley)]

PERIODICAL: Tr. Nauchno-tekhn. o-vo mukomol. i krupyan. prom-sti i
elevat. kh-va, 1957, Nr 5, pp 3-32

ABSTRACT: The investigation of the functioning of a cyclone was performed on an experimental installation by means of measuring the hydraulic resistance of the cyclone (energy criterion) and the amount of material collected by the cyclone (performance criterion). It was found that the hydraulic resistance of the cyclone diminishes with increasing concentration of the solid phase. The least amount of material carried off was found at inlet speeds of the flow from 11 to 18 m/sec. For bringing the trajectories of the air particles and the solid phase closer together, which promotes better precipitation of the solid phase, the inlet angle should be equal to 12° . The least carry-off of solid particles took place at taper angles of from $16^{\circ}40'$ to $24^{\circ}50'$. Increasing the height of the cylin-

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124-58-6-6876

Investigation of the Functioning of Centrifugal Cyclone-separators

drical part of the cyclone lowered its resistance somewhat without affecting its collection efficiency. The optimum ratio of the diameters of the outlet and the cylindrical part of the cyclone was found to be 0.6. By increasing the diameter of the cylindrical part of the cyclone, its absolute resistance is increased. A number of empirical relationships are given for determining the basic dimensions of a centrifugal separator for pneumatic transport installations.

U. Ts. Andres

1. Centrifuges--Performance
2. Materials--Separation

Card 2/2

BENDERSKIY, S.N., kand.tekhn. nauk; BURSIAI, V.R., prof., kand. tekhn. nauk; VASIL'YEV, P.N., inzh.; DORFMAN, E.Ye., inzh.; ZHURAVLEV, V.F., kand. tekhn. nauk; KESTEL'MAN, V.N., inzh.; KRUGLOV, A.N., dots., kand. tekhn. nauk; KUKIBNYI, A.A., dots., kand.tekhn. nauk; LEVACHEV, N.A., dots., kand. tekhn. nauk; LEYKIN, A.Ya., inzh.; NAREMSKIY, N.K., dots., kand. tekhn. nauk; PLATONOV, P.N., prof., doktor tekhn. nauk; SOKOLOV, A.Ya., prof., doktor tekhn. nauk; KUTSENKO, K.I., kand. tekhn. nauk, dots., retsenzent; VEREMEYENKO, Ye.I., inzh., retsenzent; KOVTUN, A.P., inzh., retsenzent; SEMENYUK, A.I., retsenzent; KASHCHEYEV, I.P., inzh., retsenzent; PAL'TSEV, V.S., kand. tekhn. nauk, retsenzent; KHMEL'NITSKAYA, A.Z., red.

[Conveying and reloading machinery for the overall mechanization of the food industries] Transportiruiushchie i peregruzochrye mashiny dlia kompleksnoi mekhanizatsii pishchevykh proizvodstv. Moskva, Pishchevaia promyshlennost', 1964.
759 p. (MIRA 18:3)

(Continued on next card)

BENDERSKIY, S.N.--- (continued). Card 2.

1. Odesskiy tekhnologicheskiy institut imeni M.V.Lomonosova (for Kutsenko, Naremskiy, Veremeyenko, Kovtun).
2. Starshiy ekspert Upravleniya po avtomatizatsii i oborudovaniyu dlya pishchevoy promyshlennosti Gosudarstvennogo komiteta po mashinostroyeniyu pri Gosplane SSSR (for Semenyuk).
3. Glavnyy mekhanik Gosudarstvennogo instituta po proyektirovaniyu predpriyatiy mukomol'nokrupyanoy i kombikormovoy promyshlennosti i elevatorno-skladskogo khozyaystva (for Kashcheyev).
4. Zaveduyushchiy laboratoriyey Vsesoyuznogo nauchno-issledovatel'skogo instituta zerna i produktov ego pererabotki (for Pal'tsev).

L1981

S/858/62/000/001/003/013
D296/D307

27 1100
27 1220

AUTHOR: Narepekha, O. M.

TITLE: Study of the protein fractions in the brain after exposure to x rays

SOURCE: L'vov. Universytet. Problemna lyaboratoriya radiobiolohiyi. Biologicheskoye deystviye radiatsii, no. 1, 1962, 26-29

TEXT: The author studied changes in the water-soluble proteins of the brain in 10 adult rabbits exposed to total body radiation by means of a dose of 800r at a rate of 16r/min. After the exposure, the brain was cleaned of blood, meninges and blood vessels, and was homogenized with an equal volume of normal saline. The homogenate was frozen by means of liquid nitrogen and left in the deep freeze for 24 hours. The homogenate was then melted, and centrifuged for one hour at 15,000 rpm. The supernatant liquid obtained had a protein content of 1.8 - 2%. To increase this to the concentration of serum protein (7 - 8%) the solution was precipitated

Card 1/2

Study of the protein ...

S/858/62/000/001/003/013
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with tannin and the protein was liberated from the protein-tannate complex with caffeine. The pH adjusted to 4.7. After ten minutes, the solution was centrifuged, the supernatant liquid was discarded and the centrifugate washed twice in normal saline and redissolved by the addition of caffeine. The solution was centrifuged for 30 minutes at 15,000 rpm, after which the centrifugate contained the protein liberated from the protein-tannate complex. The solution obtained had a protein concentration of 9 - 10%. This was then investigated by electrophoresis on agar gel in a veronal-medinal buffer (pH 8.6), at a voltage of 220 v. In the control rabbits, electrophoresis of the solution obtained in the described manner yields 9 - 11 fractions, one of which was a pre-albumin fraction, the second an albumin fraction, and the others corresponded to various serum-globulin fractions. In rabbits exposed to radiation the number of fractions increased to 13, mainly fractions corresponding to the serum-albumins. There is 1 figure.

ASSOCIATION: Kafedra fiziologii cheloveka i zhivotnykh L'vovskogo universiteta (Department of Human and Animal Physiology, L'vov University)

Card 2/2

Country : USSR

M

Category: Cultivated Plants. Grains.

Abs Jour: RZhBiol., No 11, 1958, No 48890

Author : Chkhenkeli, N.I.; Marsheli, T.A.

Inst : Georgian Agricultural Inst.

Title : Density of Corn Stand in Square-Pocket Sowing.

Orig Pub: Tr. Gruz. s.-kh. in-ta, 1957, 46, 245-253

Abstract: No abstract.

Card : 1/1

M-40

Narsheli, T. A., Cand of Agri Sci -- (diss) "Comparative Effectiveness of Mineral Fertilizers Applied During the Primary Plowing and the Pre-Sowing Preparation of the Soil for Sugar Beets," Tbilisi, 1959, 23 pp (Georgian Agricultural Institute) (KL, 8-60, 118)

NARASHEV, O.

EXCERPTA MEDICA Sec 13 Vol 13/2 Dermatology Feb 59

510. PENETRATING ULCERS IN LEPROSY (Russian text) - Torsuev N.A., Nareshey O., Kiryukhina A.I., Kirshfeldt E.P., Onikul Ya.G., Stepanov V.I., Sysoev, Udovenko V.I., Tsokhonis T.A., Chernyshova L.M. and Shevtsova. Rostov/Don - SBORN. NAUCH. RAB. PO LEPROL. I DERM. (Rostov-na-Donu) 1956, 7(180-220) Tables 20

Malum perforans is considered to be the most serious and the most common form of trophic disturbances in leprosy. 248 such cases (142 men and 106 women) were kept under observation. The lesions were more common in patients over 30 years of age and were always preceded by other dystrophic manifestations. In 5% of cases the ulcer had existed for under a year, in 34% for 1-5 years and in 61% for over 5 years, and this period was not influenced by the type of leprosy. In 123 cases the ulcers were single while 122 patients had 2-6 ulcers. In one third of the latter group the ulcers were located on both lower limbs. Multiple ulcers were more common in women. Ulcers were met with twice as often in the undifferentiated form of leprosy than in the pure maculo-anaesthetic form. The total duration of

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the disease was 5-15 years in 48.8% of the 248 patients and 15-25 years in 34.9%. The tendency to penetrating ulcer formation increases with the duration of the disease as a result of progressing changes in the peripheral nerves. The ulcers were round or oval in 70.5%, irregular in 17.1% and fissure-like in 12.4% of cases. The edges were callous and indurated in 72.9%, moderately so in 21.4% and soft in 5.7% of cases. The colour of the edges and floor of the ulcers was bright red in 23.3%, greyish-red in 37% and dirty grey in 32.2% of cases, while in 32.1% of patients the floor was covered by greyish discharge. In 14% of cases the floor of the ulcer rested on the underlying bone. Secondary pyogenic infection was present in 45.2% of patients. No discharge was ever observed from the ulcers of 13 cases. In 54.7% of cases marked neuritis was present. In 85.9% of cases of ulcers of the feet the posture of the latter was abnormal due to the involvement of peripheral nerve trunks. In 129 cases the ulcers were accompanied by deformities of the toes.

Mashkilleison Jr - Moscow (S)

GARBUZOV, Z.Ye., inzh.; NARET, G.B., inzh.; SERGEYEV, A.I., inzh.

The ETN-122 excavator. Mekh. stroi. 15 no.4:6-8 Ap '58.

(MIRA 11:5)

(Excavating machinery)

NARET, G.B., inzh.

. Rapid transportation of soils in machines of continuous operation.
Stroi. i dor. mash. 8 no.11:17-18 N '63. (MIRA 17:1)

(4)
ACC NR: AM5027781

Monograph

URV

Garbuzov, Z. YE.; Il'gisonis, V. K.; Mutushev, G. A.; Naret, G. B.; Podborskiy, L. YE. Uspenskiy, V. P.

Continuous excavating machines; design and construction (Zemleroynyye mashiny nepre-ryvnogo deystviya; konstruktsii i raschety) Moscow, Izd-vo "Mashinostroyeniye," 1965. 275 p. illus., biblio., tables. 3700 copies printed.

PURPOSE AND COVERAGE: The book describes the basic type of continuously operating excavating machines, such as chain and rotor trench excavators, chain bucket transverse excavators, open-cut excavators, elevating graders, as well as excavating machines used in irrigation and reclamation construction. The discussion of design includes determination of the basic parameters of machines, power values of drive mechanisms, general statistical and dynamic calculations, and load conditions of units and assemblies. The book is intended for engineering and technical personnel of design offices and machine building plants. It may also be useful for students of civil engineering and machine building. There are 54 references, of which 52 are Soviet.

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Introduction -- 3

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UDC: 621.879.4.002.2

ACC NR: AM5027781

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- Ch. X. Continuous excavating machines for the construction of irrigation and drainage canals — 228
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SUB CODE: 13 / SUBM DATE: 15Apr65/ ORIG REF: 052/ OTH REF: 002

Card 2/2

GARBUZOV, Z.Ye.; IL'GISONIS, V.K.; MUTUSHEV, G.A.; NARET, G.B.;
PODBORSKIY, L.Ye., kand. tekhn. nauk; USPENSKIY, V.P.;
FEDOROV, A.P., inzh., retsenzent

[Continuous action earth-digging machines; designs and
calculations] Zemleroi nye mashiny nepreryvnogo deistviia;
konstruktsii i raschety. [By] Z.E.Garbuzov i dr. Moskva,
Mashinostroenie, 1965. 274 p. (MIRA 18:7)

NARETS, L. K., Docent

USSR

Cand. Technical Sci.

"Fifteen years of operation of a welded bridge, "
Avtogen, Delo, No. 6, 1949

NARETS, L.K., dotsent, kandidat tekhnicheskikh nauk (Tallinn)

Comptometer solution of canonical equations in structural mechanics
by the Gauss-machine method. Issledovaniia po teorii sooruzhenii.
Sbornik statei no.6:413-424 '54. (MIRA 7:11)
(Structures, Theory of) (Strains and stresses) (Elastic plates
and shells)

NARETS, L. K.

"Computation of Statistically Indeterminate Systems by Machine Methods".
Tr. Tallinsk. Politekhn. in-ta, Ser. A, No 54, pp 1-52, 1954.

Several methods of solving systems of linear algebraic equations are expounded in an elementary manner, with particular attention paid to methods that permit the effective application of the calculating machine, and also the problems of organization of computations and their checking. Application of these methods to the calculation of frames is considered in detail, particularly the problems of the computation of frames without calculation of the numerical values of the unknowns of the algebraic system. A large number of concrete examples is presented. (RZhMekh, No 10, 1955)

SO: Sum No 884, 9 Apr 1956

PHASE I BOOK EXPLOITATION SOV/1471

Narets, L.K.

Raschet staticheskii neopredelimykh sistem na malykh vychislitel'nykh mashinakh (Calculation of Statistically Indeterminate Systems on Small Calculating Machines) Moscow, Gosstroyizdat, 1958. 60 p. 4,000 copies printed

Scientific Ed.: I.K. Snitko, Doctor of Technical Sciences; Ed. of Publishing House: N.O. Yegorova; Tech. Ed.: N. Borovnev

PURPOSE: The booklet is intended for designers in structural engineering, scientific workers and students at vuzes.

COVERAGE: The booklet is concerned with applications of machine computing techniques in structural engineering. The mathematical principles are given in elementary form and modern calculation methods of structural mechanics are presented. By means of numerous examples, computing techniques using small calculators for the

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Calculation of Statistically Indeterminate Systems (Cont.) SOV/1470

solution of systems of linear algebraic equations occurring in the design of statistically indeterminate structures are demonstrated. There are 26 references, 21 of which are Soviet, 2 French and 3 German.

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Calculation of Statistically Indeterminate Systems (Cont.) SOV/1470

- 6. Simplifications in solution of symmetrical equation systems 20
- 7. Calculation in a computational table. Setup of checking in basic stages of calculations 21

Ch. II. Calculation of Statistically Determinate Systems on Small Computers

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Calculation of Statistically Indeterminate Systems (Cont.) SOV/147Q

- 7. Calculation of frames without computation of unknowns. Application of the algebraic Jordan-Eitkin method. 42
- 8. Application of Jordan-Eitkin method to calculation of frames by the force method. Group diagrams and group forces. Orthogonalisation of diagrams
- 9. Application of Jordan-Eitkin method to calculation of frames by the method of deformations. Application to generalized method of deformations. Connection with the methods of N.M. Bernadskiy, Hardy, Cross and other relaxation methods 50
- 10. Other applications of the Jordan-Eitkin method 56

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AVAILABLE: Library of Congress

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5-14-59

Card 4/4

NARETS, Lev Karlovich, dots., kand. tekhn. nauk

[New problems in the statics, dynamics and stability of beams arising in connection with the appearance of computers of continuous and discrete action] Novye voprosy statiki, dinamiki i ustoychivosti balok, vznikaiushchie v svyazi s pojavleniem vychislitel'nykh mashin nepreryvnogo i diskretnogo deistviia; uchebnoe posobie. Tallinn, Tallinskii politekhn. in-t, 1963. 87 p.

(MIRA 16:11)

1. Tallinskiy politekhnicheskii institut. Kafedra stroitel'noy mekhaniki (for Narets).

(Beams and girders)

(Electronic analog computers--Programming)

NAREYKIN, M.T.

Reconditioning iron castings by graze-welding with copper. Svar.
proizv. no.7:38-39 JI '65. (MIRA 13:8)

NAREZHNIY, S.

Change the system of compensating grain procurement stations
for marketing expenses. Den.1 kred. 17 no.9:53 S '59.
(MIRA 12:12)

1. Starshiy kreditnyy inspektor Stalingradskoy kontory Gosbanka.
(Grain trade--Finance)

NARZHNII, S.

The most important task of grain procurement stations is to lower operating costs. Muk.-elev. prem. 25 no.5:8-9 My '59.
(MIRA 12:8)

1. Starshiy inspektor Stalingradskey oblastnoy kontory Gosbanka.
(Grain trade)

NAREZHNIY, S.

Analyzing the financial results of state farms. Den. 1 kred. 18
no.9:59-62 S '60. (MIRA 13:8)
(State farms--Finance)

NAREZHNIY, S.; OGDANETS, N.; MOSUNOV, G.

Credit-payment service to collective and state farms. Den. 1
kred. 19 no.3:37-48 Mr '61. (MIRA 14:3)

1. Starshiy kreditnyy inspektor Stalingradskoy kontory Gosbanka (for Narezhniy).
2. Nachal'nik otдела kreditovaniya i finansirovaniya sel'skogo khozyaystva Stalinskoy kontory Gosbanka (for Ogdanets).
3. Upravlyayushchiy Novo-Tor'yal'skim otde-
leniyem Gosbanka Mariyskoy ASSR (for Mosunov).
(Agricultural credit)
(Banks and banking)

NAREZHNYI, D.

Automobile modelmakers of Uzbekistan. Za rui. 19 no.7:32
Jl '61. (MIRA 14:8)

1. Instruktor respublikanskogo komiteta Dobrovol'nogo
obshchestva sodeystviya armii, aviatsii i flotu Uzbekskoy
SSR.

(Uzbekistan--Automobiles--Models)

NAREZHNYI, E.G.

NAREZHNYI, E.G., inzh.

Studying heat exchanges in gas turbine combustion chambers with air
whirl cooling. Sudostroenie 22 [i.e.23] no.10:17-20 0 '57.

(Heat--Transmission) (Marine gas turbines) (MIRA 11:2)

24(8)

PHASE I BOOK EXPLOITATION SOV/3118

Narezhnyy, E. G.

Issledovaniye teploobmena v gazoturbinnoy kamere sgoraniya s zavikhritelem okhlazhdayushchego vozdukha; avtoreferat dissertatsii na soiskaniye uchenoy stepeni kandidata tekhnicheskikh nauk (Study of Heat Exchange in Gas Turbine Combustion Chambers With Swirling Devices of Secondary Air Flow; Author's Abstract of a Dissertation for the Degree of Candidate of Technical Sciences) Leningrad, 1958. 16 p. 150 copies printed.

Sponsoring Agency: Leningradskiy korablestroitel'nyy institut.

Scientific Ed.: V. M. Antuf'yev, Candidate of Technical Sciences, Docent.

PURPOSE: This booklet may be useful to scientists and engineers designing gas turbine engines or doing research in the field of heat transfer in gas turbines.

COVERAGE: This is an author's abstract of a dissertation for the degree of Candidate of Technical Sciences. The author reviews
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Study of Heat Exchange (Cont.)

SOV/3118

3. The position of the wall temperature maximum in the combustion chamber is stable and does not depend on operating parameters. 4. The type of fuel atomizer has little influence on the radiation temperature of the flame, except for atomizers which substantially disturb the aerodynamics of the combustion chamber and consequently the temperature field of the flame. 5. The investigation of heat exchange in a combustion chamber with a cooling air swirling device may be simplified by determining the convective heat transfer coefficient on the basis of consecutive isothermic blowings through, and by measuring the temperatures of the combustion chamber walls and of the cooling air in combustion tests. 6. The calculation of the maximum temperature of the wall of the combustion chamber with a cooling air swirling device should be made according to the method suggested by the author in this article. No personalities are mentioned. There are no references.

AVAILABLE: Library of Congress

Card 3/3

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84483

S/112/59/000/014/015/085
A052/A001

26.2/35

Translation from: Referativnyy zhurnal, Elektrotehnika, 1959, No. 14, p. 32,
28754

AUTHORS: Kuznetsov, L. A., Lamm, Yu. A., Narezhnyy, E. G.

TITLE: Combustion Chambers of Gas-Turbine Installations

PERIODICAL: Tr. Nevsk. mashinostroit. z-da, 1957 (1958), No. 1, pp. 227-244

TEXT: The results of investigations of combustion chambers for liquid fuel and low-calorie gas are reported. The investigations were carried out both on models and on a test gas-turbine installation NZL GT-550-1.2. The cyclon combustion chamber with a cup proved to be the most promising one for liquid fuel. It represents a combination of three swirlers, 2 of which are used for the primary air supply and the third for curling the secondary air. The amount of primary air secures combustion with an average excess of 2-2.5. The intermixing of combustion products with secondary air is performed by an S-like mixer which reduces the total resistance of the combustion chamber by ~10% and enables one to obtain any temperature field behind the combustion chamber. Coefficient of

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Combustion Chambers of Gas-Turbine Installations

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A052/A001

resistance referred to the velocity at the inlet is 8-10. Diagrams show temperature fields under various operational conditions of the combustion chamber. The advantages of cooling the combustion chamber with a secondary air swirler are shown. A blast-furnace gas combustion chamber has a 2-stage swirler with opposite angles of curl. Gas and air are supplied through the both swirlers in alternating layers. Fields of axial and tangential velocities at cold and hot blowings are presented, as well as temperature fields at burning liquid fuel in the combustion chamber. Gas combustion with $Q_p^H = 600-100 \text{ kcal/nm}^3$ is secured only in a combustion chamber with a standby liquid fuel flame. The developed combustion chamber designs are used in the serial installation GT-600-1.5 as well as in PG-50 000 and GT-600-6 installations.

V. S. P.

Translator's note: This is the full translation of the original Russian abstract.

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67489

24.5400

SOV/24-59-5-21/24

AUTHOR: Narezhnyy, E.G. (Leningrad)

TITLE: A Method of Calculating the Maximum Temperature in the
Flame² Tube of a Gas Turbine Combustion Chamber ²³

PERIODICAL: Izvestiya Akademii nauk SSSR, Otdeleniye tekhnicheskikh
nauk, Energetika i avtomatika, 1959, Nr 5, pp 182-185 (USSR)

ABSTRACT: The paper is a continuation of previous work (Ref 1).
The temperature of the metal in a gas turbine combustion
chamber is a result of equilibrium between the flame and
the wall, and between the wall and the cooling air. The
processes occurring in the chamber, working with liquid
or gaseous fuel, and with forced air cooling, can be
described approximately by equations which include those
of continuity, viscous fluid motion, constitution, energy,
material exchange, homogeneous combustion, radiation
exchange and convective heat exchange. Applying the
theory of similarity, it can be shown that the ratio (R)
of the radiation per unit area to the maximum possible
radiation at the same temperature is a function of the
Boltzmann criterion (B), the blackness of the flame (ϵ),
and a geometric factor. Experimental results for a

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A Method of Calculating the Maximum Temperature in the Flame Tube of a Gas Turbine Combustion Chamber

chamber with a mechanical atomiser show that if $35 < B < 120$, then

$$R/\epsilon = 0.008 B,$$

and if

$120 < B < 200$, then

$$R/\epsilon = 0.96.$$

Similar results are obtained with an ejection atomiser. The wall temperature is found from these results, in conjunction with the heat balance equation for the walls. The calculated values show good agreement with experiment. There are 4 figures and 3 references, of which 2 are Soviet and 1 is English.

Card
2/2

SUBMITTED: April 10, 1959



DUBROVSKIY, O.V., kand. tekhn. nauk; KUZNETSOV, L.A., kand. tekhn. nauk; NAREZHNYI, E.G., kand. tekhn. nauk

Experimental study of a model of a three-register combustion chamber of a gas turbine system operating on liquid fuel.
Teploenergetika 10 no.7:31-36 J1 '63. (MIRA 16:7)

1. Nevskiy mashinostroitel'nyy zavod i Leningradskiy korablestroitel'nyy institut.

(Gas turbines)

ACC NR: AR6035220

SOURCE CODE: UR/0274/66/000/008/B087/B087

AUTHOR: Narezhnyy, E. G.; Sudarev, B. V.

TITLE: Effects of certain heat and design parameters on the degree of overheating of a single micromodule cooled under natural convection conditions

SOURCE: Ref. zh. Radiotekhnika i elektrosvyaz', Abs; 8B613

REF SOURCE: Tr. Leningr. korblestroit. in-ta, vyp. 47, 1965, 81-90

TOPIC TAGS: parameter, heat conductivity, heat transfer, module, micromodule, printed plate, printed circuit

ABSTRACT: The micromodule, fastened vertically to a printed plate, contains one heat-releasing element connected to the plate by wire leads; the plate is cooled due to natural convection. The differential equation of heat conductivity for this design is determined in a general form and the temperature of the heat releasing element is expressed in terms of basic thermal and design parameters M. An analysis of the relationships shows that since the heat transfer from the module is limited by conditions of external heat transfer from the surface, more effective measures of

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UDC: 621.396.6-181.5

ACC NR: AR6035220

its amplification are the development of the surface M with the aid of ribs, the increase of the printed plate, the use of unloading, metal plates, and the placement of the working element in the upper face part of M, if the wire leads are directed downward. Orig. art. has: 8 figures. Bibliography of 1 title. [Translation of abstract] [NT]

SUB CODE: 20/

Card 2/2

NARGIELLO, Janusz; DYNKI, Wladyslaw

An installation for the removal of die-stamped materials from the molds. Mechanik 35 no.6:340-341 Je '62.

NARGIZYAN, E.A.

Method of determining the capacity and energy of long-range regulation in relation to the number of hours of use. Izv. AN Arm. SSR. Ser. tekhn. nauk 14 no.5:67-72 '61. (MIRA 15:1)
(Transcaucasia--Electric power plants)

STYRIKOVICH, M.A.; NARGIZYAN, E.A., inzh.

Concerning the choice of thermal electric power plants for systems with long-range regulation. Teploenergetika 10 no.1:64-67 Ja '63. (MIRA 16:1)

1. Energeticheskiy institut pri Gosudarstvennom nauchno-ekonomicheskom sovete Soveta Ministrov SSSR. 2. Chlen-korrespondent AN SSSR (for Styrikovich).

(Electric power production)
(Electric power plants)

NARGIZYAN, G. A.

NARGIZYAN, G. A. "Clinical aspects of rheumatic and chronic septic endocarditis." Yerevan State Medical Inst. Yerevan, 1956.
(Dissertation for the Degree of Candidate in Sciences)
Medical

So: Knizhnaya Letopis', No. 18, 1956

MNATSAKANOVA, T.S., zaal.deyat.nauki, prof.; KATANYAN, A.A., doktor med.nauk,
dotsent; DARBINYAN, G.L., kand.med.nauk; MARGIZYAN, G.A.

Clinical observations of the cardiovascular reaction in patients
with hypertension of the first and second stages being treated at
the Dzhermuk health resort. Vop.kardiol. no.1:37-48 '56.

(MIRA 12:9)

1. Iz Fak.terap. kliniki Yerevanskogo meditsinskogo instituta.
(CARDIOVASCULAR SYSTEM) (HYPERTENSION) (DZHERMUK--HYDROTHERAPY)

MNATSAKANOV, T.S., KATANYAN, A.A., NARGIZYAN, G.A.

Effect of Dzhermuk mineral bath on hemodynamics. Vop.fizioter.
i lech. fiz.kul't. 23 no.6:498-502 N-D '58 (MIRA 11:12)

1. Iz fakul'tetskoy terapevticheskoy kliniki (zav. - zaslushenny
deyatel' nauki prof. T.S. Mnatsakanov) Yerevanskogo meditsinskogo
instituta.

(CARDIOVASCULAR SYSTEM)
(DZHERMUK--MINERAL WATERS)

MHATSAKANOV, T.S., prof.; KATANYAN, A.A., prof.; NARGIZYAN, G.A., kand.
med.nauk

Carditoxin treatment of patients with chronic circulatory insuffien-
cy. Sov.med. 24 no.1:89-93 Ja '60. (MIRA 13:5)

1. Is kliniki fakul'tetskoy terapii (sav. - prof. T.S. Mhatsakanov)
Yerevanskogo meditsinskogo instituta.
(DIGITALIS therapy)

KATANYAN, A.A., prof.; NARGIZYAN, G.A., kand.med.nauk

Prolonged anticoagulant therapy of patients with coronary atherosclerosis and stenocardia. Terap.arkh. 32 no.10:55-58 '60.

(MIRA 14:1)

1. Iz terapevticheskoy kliniki (zav. - prof. A.A. Katanyan)
fakul'teta usovershenstvovaniya vrachey Yerevanskogo meditsinskogo instituta.

(CORONARY HEART DISEASE) (ANTICOAGULANTS)

KATANYAN, A.A., prof.; MARGIZYAN, G.A., kand.med.nauk

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the process of treatment in coronary atherosclerosis. Terap.
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usovershenstvovaniya vrachey Yerevanskogo meditsinskogo instituta.
(CORONARY HEART DISEASE) (ARTERIOSCLEROSIS)

NARGIZYAN, G.A.; KANDARYAN, M.S.

State of the coronary circulation in patients with anemia
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no.4:35-39 '63 (MIRA 16:12)

1. Institut perelivaniya krovi Ministerstva zdravookhraneniya
Armyanskoy SSR.

NARGIZYAN, G.A.

Clinical course in coronary atherosclerosis. Zhur. eksp. i
klin. med. 5 no.1:122-124 '65. (MIRA 18:10)

NARIBOLI, G. A.

"Mixed boundary value problems for rectilinear plates.

p. 507 (Archiwum Mechaniki Stosowanej, Vol.9, No. 5, 1957, Warsaw, Poland)

Monthly Index of East European Accessions (EEAI) LC, Vol. 8, No.1, Jan 59

3

Nariboli, G. A. Mixed boundary value problems for
rectilinear plates. II. Arch. Mech. Stos. 10 (1958), 129-
142. (Polish and Russian summaries)

The author here extends the results of his earlier paper
[Arch. Mech. Stos. 9 (1957), 507-524; MR 19, 1107] to the
problems of buckling and free vibrations of some recti-
linear plates.

By use of the analogy that the Laplacian of deflection
of a supported rectilinear plate corresponds to the stream
function due to a vortex in a cylinder of the same cross-
section, the plate problem is reduced to a two step
harmonic problem. Here this solution is used to obtain
the deflection due to unit moment applied normal to the
edge. The solution of total deflection due to distributed
edge moments along the boundary of a supported plate

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is then represented in an integral form. The condition that the slope must vanish on the clamped part leads to a homogeneous Fredholm integral equation for moment distribution. This is reduced to the solution of an infinite set of algebraic equations whose solubility condition leads to the characteristic equation as the vanishing of an infinite determinant.

The cases of right-angled isosceles triangle, right-angled triangle with 30° angle and equilateral triangle are treated in detail. Numerical values of the first eigen-value are obtained in each case, and compared with the values under supported boundary conditions. The results show that for the same boundary, the rise in the parameter giving the least buckling load is higher than that giving fundamental frequency and the rise increases with the decrease in angle.

B. R. Seth (Kharagpur)

PROCESSES AND PROPERTIES INDEX

114

CA

The origin of acetylcholine contracture. I. Mechanism of contraction. S. P. Narikashvili. *Bull. biol. med. appl. U. S. S. R.* 7: 1300 (1969) (in English); cf. C. A. 34: 3214. Frog muscles (*m. sartorius* (nontonic) and *m. pectoralis pars abdominalis* (tonic)) were so clamped in the middle that propagation of the impulse from one half to the other was not prevented. If half the muscle was treated with acetylcholine (I) (max. concn. 1:500), only the treated half contracted. However, in some cases exposure of half of *m. sartorius* resulted both in the typical I contracture and also in several rapid twitches which propagated toward the other half. I usually caused greater contraction in the "nervous" than in the "nerveless" regions of both muscles. The reasons for the variation in the intensity and duration of contraction from one muscle to another are not known. "Tonic" muscles (e.g., *m. pectoralis pars abdominalis* and *m. gastrocnemius*) never showed any rapid twitches regardless of the concn. of the I soln. The chemistry of muscle contraction induced by elec. stimulation and by administration of I is apparently identical. But with elec. stimulation and rapid twitches the contraction of the nontonic muscle is evoked by excitation, while with I it is due not to the excitatory process, but merely to a local increase in the basal bio. process (i. e., the heterochromous enzymic process of splitting and restoration of the excitable system which occurs in the "quiescent" muscle) which gives rise to an increased accumulation of the "contracting" substances and so causes local contraction of the muscle.

Ruth Berggren

METALLURGICAL LITERATURE CLASSIFICATION

1ST AND 2ND COPIES

PROCESSES AND PROPERTIES INDEX

11I

ca

Acetylcholine contracture of the muscles of invertebrates. S. P. Narikashvili. *Bull. biol. med. exper. U. R. S. S. 7: 243-5(1939)* (in English).--The threshold concns. of acetylcholine (I) and nicotine (II) for contracture of the smooth muscles of the invertebrates *Arenicola marina*, *Cucumaria frondosa* and *Nereis virens* are 1:10⁶ and 1:10⁶, 1:10⁶ and 1:20, and 1:10⁶ and 1:25, resp. The circular muscle of *Cyanea arctica*, the adductor of *Pecten islandicus* and the muscles of the segments and claws of *Hyas araneus* were insensitive to I and II. All of the invertebrate muscles were insensitive to lactic acid and CHCl₃.
S. A. Karjala

COMMON ELEMENTS

COMMON VARIABLES INDEX

ASM-31A METALLURGICAL LITERATURE CLASSIFICATION

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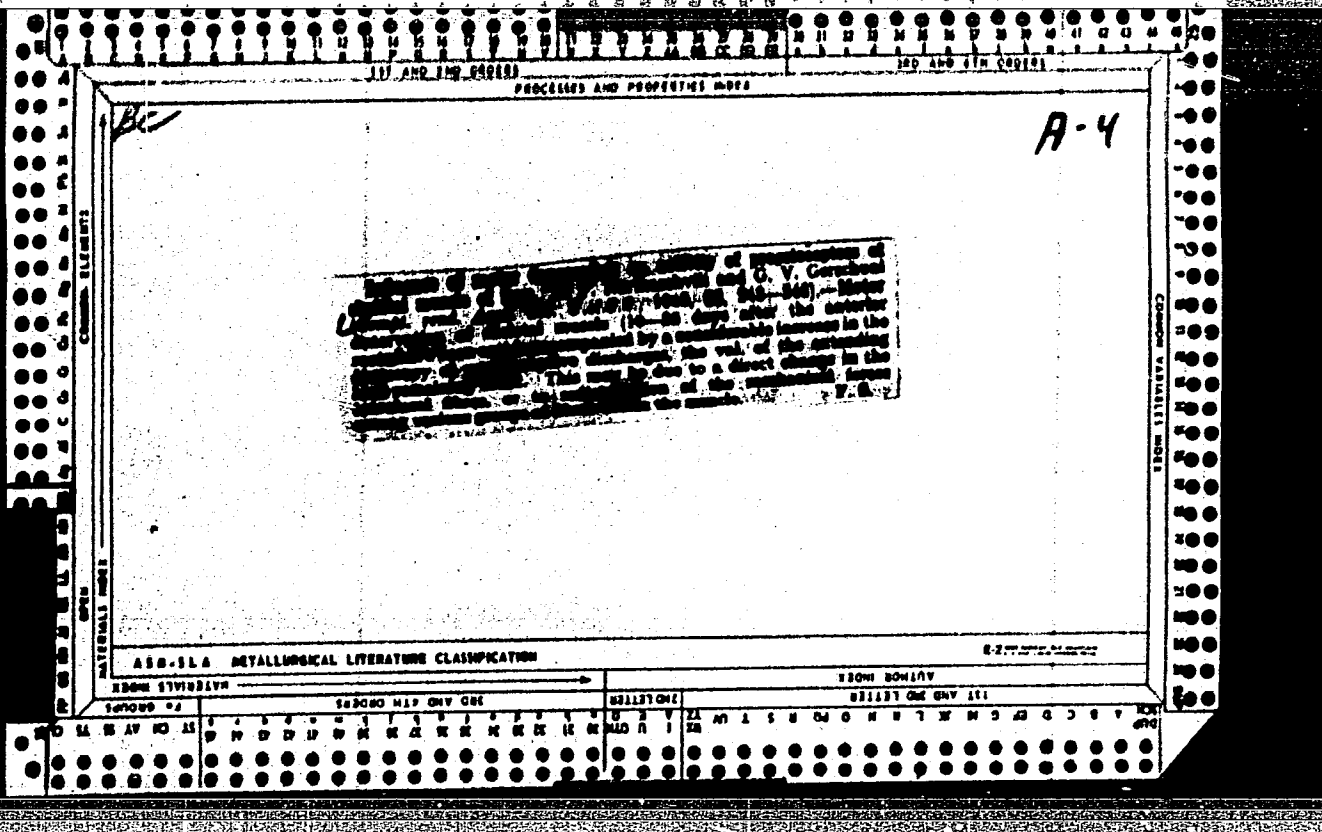
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Page 1 *Handwritten: 1945, 6 (377-401)*

Bakuradze A. and Narikashvili S. Spontaneous electrical activity of the brain during sleep Transactions of the Beritashvili Physiological Institute 1945, 6 (377-401) Illus. 6

The electrical activity of the cerebral cortex was studied during normal night sleep in 10 male subjects aged 18 to 40 years. Potentials were led off bipolarly along and across the brain. Two cortical regions were recorded simultaneously by a Messerschleif oscillograph every 10 or 20 minutes during the whole night's sleep. The alpha-rhythm recorded from the occipito-parietal and temporal regions decreased and became irregular during the drowsy state disappearing with the deepening of sleep. When sleep developed gradually the decreasing alpha-rhythm was replaced by weak and irregular potentials. When sleep was deepening quickly the alpha-rhythm disappeared without a preliminary decrease. During this time the cerebral

cortex produced weak and irregular potentials which generally occurred in the absence of the alpha-rhythm ('basic electrical activity' after Beritoff.) The basic activity recorded from the occipito-parietal and temporal regions showed periods of weakening, 'silent periods', lasting sometimes till awaking in the morning.

In the frontal and central regions, where the alpha-rhythm during the waking state is generally weaker, the replacing of the latter by basic activity potentials was more evident than in the occipital lobes. From the very beginning of the drowsy state a progressive increase of the irregular potentials of basic activity was noticed, sometimes associated with temporary silent periods. The increase of basic activity

Page 2

in the anterior half of the brain continued parallel with a decrease of alpha-rhythm in the posterior half. The potentials of basic activity sometimes became regular in frequency ranges from 1 to 3 p.s. and from 12/ to 24 p.s. Such slow potentials of great intensity (100 microvolts and more) have been termed delta waves (Loomis et al., Blake and Gerard, Davis et al.). Quicker potentials (12 to 24 p.s.) have been termed by different authors 'spindles'. Therefore sleep does not lead to a general decrease of electrical activity of the cerebral cortex, as has been assumed by many authors on the ground of the weakening of alpha-waves.

One form of cortical activity (the alpha-rhythm) is merely replaced by another (the basic activity). The latter even increases during sleep, becoming more regular (delta like waves and spindles). The increase of basic activity sets in earlier and is more pronounced in the anterior parts of the brain. Contrary to the statement of Loomis et al., simultaneous arising of delta-like waves and spindles could be observed. During sleep all potentials in symmetrical regions of both hemispheres were found to follow a synchronous course. In different regions of the same hemisphere the synchronism was observed only for more or less intensive alpha-waves whereas the basic activity potentials showed for the most part a lack of synchronism. The gradual increase of the cortical basic activity with the deepening of sleep is apparently caused by turning off or diminution of the flow of afferent impulses from different receptors (especially from proprioceptors). This leads to a decrease of excitability and turning off of the corticothalamic nerve circles. Thus the self-exciting nerve circles of the cerebral cortex begin to work more synchronously, and hence the potentials of basic activity become more intensive and regular.

Dzidzishvili-Tiflis

Page 3

So: Physiology, Biochemistry and Pharmacology, Section II., Vol. I, #1-6

MARIKASHVILI, S.P.

Electrophysiology of the brain stem, the cerebral cortex, and the cerebellum in a non-narcotized cat. Trudy inst. fiziol. AN Gruz. (MIRA 9:7)
SSR 8:135-187 '50.
(ELECTROPHYSIOLOGY) (BRAIN)

NARIKASHVILI, S.P.

Mechanisms of the conditioned reflex activity. Zhur. vys. nerv.
deiat. 12 no.4:613-622 J1-Ag '62.

(MIRA 17:11)

1. Institute of Physiology, Georgian Academy of Sciences, Tbilisi.

HARIKASHVILI, S.P.

Effect of stimulation of subcortical segments on the electrical activity of the cerebral cortex. Trudy Inst. fiziol. AN Gruz. SSR 9:133-154 '53. (MLRA 8:9)
(Cerebral cortex)

Narikashvili

Category: Georgian SSR/General Division. History. Classics. Personalities. A-2

Abs Jour: Referat Zh.-Biol., No 9, 10 May 1957, 34897

Author : Narikashvili

Inst : not given

Title : The Leading Georgian Scholar, Academician I. C. Beritashvili

Orig Pub: Metsniereba da tekhnika, 1955, No 6, 10-13

Abstract: The article is devoted to Acad. Beritashvili (born, 1884), a Georgian physiologist, founder of the physiology school of Georgia, leader of the Institute of Physiology of the Academy of Sciences of the Georgian SSR. His work in the field of the physiology of the muscular-nervous system attained great renown, particularly on the central nervous system (his research was devoted to the contracting ability of various muscles, the interaction of the processes of stimulation and contraction, to the unifying activity of the cortex of the large hemispheres, etc.) Beritashvili is the author of a large number of scientific works, among which is the two volume manual "General Physiology of the Muscular and Nervous Systems". (1922)

Card : 1/1

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USSR / Human and Animal Physiology. Nervous System, Cerebral Cortex. T

Abs Jour : Ref Zhur - Biol., No 15, 1958, No. 70527

Author : Narikashvili, S. P.

Inst : Academy of Sciences GSSR

Title : The Interaction of Responses of Various Receptor Regions of the Cerebral Cortex

Orig Pub : In the collection, Probl. sovrem. fizio. nervn. i myshechn. sistem. Tbilisi, AN GruzSSR, 1956, 225-241

Abstract : In experiments on cats under light nembutal narcosis or on "encephale isolé" preparations, studies were made of the interaction of rhythmic light (IS) and sound (SS) stimuli. The addition of the SS to the IS suppressed the responses of the visual zone of the cortex. Sometimes there was also a facilitating action of the SS on the IS. Upon combination of infrequent SS and IS, it was possible to observe that the SS changes principally

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NARIKASHVILI, S.P.

USSR/Human and Animal Physiology - Nervous System

V-12

Abs Jour : Ref Zhur - Biol.; No 1, 1958, No 4453

Author : S.P. Narikashvili

Inst : Institute of Physiology, Academy of Sciences, Georgian SSR

Title : Bielectrical Response Potentials in Various Areas of the Auditory Region of the Cerebral Hemispheres of the Cat and Their Variations Depending on the Strength and Frequency of Auditory Stimuli Application.

Orig Pub : Tr. In-ta Fiziologii, 1956, 10, pp 73-101

Abstract : Auditory stimuli applied for 0.1 to 5 milliseconds produced a primary response -- positive oscillation -- in the back of the ectosylvian gyrus (ESG) of the cat when put under light nembutal narcosis. Between the middle and the anterior ESG the response was triphase: negative -

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original responses in all sections of the auditory region.

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USSR/Human and Animal Physiology - Nervous System

V-12

Abs Jour : Ref Zhur - Biol., No 1, 1958, No 4453

In some cases high tones exerted greater influence on positive oscillations while low tones influenced negative oscillations to a greater extent. A slight masking sound led to an increase of the latent period and a continuance of original responses. A prolonged action of the masking sound weakened its effect. Increased frequency of auditory stimuli (from eight to ten per second) led to an extinction of the secondary negative oscillation in the beginning and to an eventual disappearance of the positive oscillation; finally, when stimuli were applied very frequently, the original negative oscillation became extinct. Increase of sound intensity was accompanied by increased amplitude of original responses and expended continuance of the positive oscillation. In cases of rhythmic stimulation increased sound intensity may have caused decreased amplitude of the original response. It is therefore, assumed that the

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GUGUNAVA, Ye.; NEBIYERI, V.; NARIKASHVILI, S.P., prof., red.; GIORGADZE, O.,
red.isd-va; TODUA, A., tekhn.red.

Ivan Solomonovich Beritashvili. Vstup. stat'ia S.P.Narikashvili.
Bibliografiia sostavlena E.Gugunova i V.Nebieri. Tbilisi, 1957.
127 p. [In Georgian, German, and Russian.] (MIRA 11:4)

1. Akademiya nauk Gruzinskoy SSR, Tiflis.
(Beritashvili, Ivan Solomonovich, 1884-)
(Bibliography--Physiology)

NARIKASHVILI, S.P.; MONIAVA, E.S.

Interaction of diffuse and specific thalamocortical projection systems. Soob. AN Gruz. SSR 19 no.3:347-354 S '57. (MIRA 11:5)

1. Akademiya nauk Gruzinskoy SSR, Institut fiziologii im. akad. I.S. Beritashvili, Tbilisi. Predstavleno akademikom I.S. Beritashvili.

(CEREBRAL CORTEX) (OPTIC THALAMUS) (SENSES AND SENSATION)

EXSERPTA MEDICA, Sec. 2 Vol. 11/1 Physio-Biochem, etc. Jan 58

Narikashvili, S. P.

295. PRIMARY RESPONSE AND SPONTANEOUS ELECTRICAL ACTIVITY OF THE CORTEX (Russian text). Narikashvili S. P. I.S. Beritashvili Inst. of Physiol., Tbilisi. FIZIOL. Z. 1957, 43/7 (642-650) Graphs 5

The relation between primary response to contralateral skin stimulation and spontaneous cortical electrical activity was studied in cats anaesthetized with nembutal (20 mg./kg.) in two sets of experiments. After transient interruption of the blood supply primary responses appear earlier than slow electrical activity (which generally sets in with the first inspiration). These primary responses are usually low voltage and reversed in phase. Primary responses acquire a normal shape and amplitude after reestablishment of the basal (i.e. that preceding interruption of blood supply) pattern of spontaneous electrical activity. Alterations of primary responses were also observed during the recruiting response and EEG desynchronization caused by direct electrical stimulation of the thalamic reticular formation. The amplitude of primary cortical responses was found to depend on the period of the recruiting response: it is greater during 'waxing' of the recruiting response, remaining unchanged or decreasing on 'waning' of recruiting response potentials. EEG desynchronization exerts little or no influence upon the primary response. It is concluded that there must be a close relationship between nervous structures underlying spontaneous electrical activity of the cortex (diffuse thalamo-cortical system) and those on which the appearance of a primary cortical response depends (specific thalamo-cortical system).

Simonson - Minneapolis, Minn.

Marikashvili S. P.

AUTHORS: Daidishvili, K. M., Professor. 30-1-32/39
Chavishvili, Sh. F., Corresponding Member AS, Georgian SSR

TITLE: A Meeting With the Biologists of the Transcaucasian Region
(Vstrecha s biologami zakavkaz'ya). Joint Session of the Biological Departments of Two Academies (Ob'yedinenaya sessiya biologicheskikh otdelov dvukh akademiy).

PERIODICAL: Vestnik AN SSSR, 1958, Vol. 20, Nr 1, pp. 121-125 (USSR)

ABSTRACT: At Tbilisi a congress session of the Department for Biological Sciences AN USSR and two departments of the AN Gruzii: SSN of biological and medical, as well as of agricultural sciences took place. Also the representatives of several transcaucasian republics were present, as well as a large group of scientists from Moscow and Leningrad. During the congress, which lasted from September 28 to October 3, 3 plenary and 4 sectional sessions took place. The following reports were delivered:
1) I. S. Beritashvili. On the part played by the hemispheres of the cerebrum and the cerebellum in the spatial orientation of animals.
2) S. P. Marikashvili. The thalamic reticular system and the primary reaction of the cerebral cortex of the large hemispheres.

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A Meeting With the Biologists of the Transcaucasian Region.
Joint Session of the Biological Departments of Two Academies.

30-1-32/39

- 3) A. I. Royt'bak: Bioelectric phenomena in the course of conditional excitations.
- 4) V. V. Artem'jev: Electric reactions of the hemispheres of the cerebrum in antero- and interseptal excitations.
- 5) Yu. G. Kratin: The dependence of electroencephalogram rhythms on the analyzing activity of the brain.
- 6) L. I. Kotlyarsvskiy: On certain peculiarities of the higher nervous activity of white rats under physiological and pathological conditions.
- 7) G. Kh. Bunyatyan: Certain results concerning the control of the cerebral cortex of metabolism.
- 8) G. V. Frank: Structural- and physical-chemical bases of the creation and propagation of an excitation over nerve fibres.
- 9) P. S. Chanturishvili: On the checking of the results of the causal-analytical investigation of the development of the crystalline lens.
- 10) D. M. Shteynberg: On the part played by the humoral factors in the pubescence of arthropods.
- 11) L. I. Dzhaparidze: The nutrition of the vine and chlorosis.
- 12) H. A. Krasil'nikov: Antibiotic substances and their use in the breeding of plants.

Card 2/4

A Meeting With the Biologists of the Transcaucasian Region.
Joint Session of the Biological Departments of Two Academies.

30-1-32/39

- 13) V. E. Galicashvili: Contradictory peculiarities in the heredity of relict types of wood and their importance for the development of vegetable organisms.
- 14) M. Kh. Shaylakhyan: The chemical stimulation of the growth and the blossoming of plants.
- 15) Ye. N. Mishustin: The theory of the microbe associations of the soil.
- 16) P. A. Genkel': The importance of colloidal-chemical properties of the protoplasm for the physiology of plant resistance.
- 17) T. S. Sulakadze: Growth substances and the resistance against frost of citrus plants.
- 18) M. N. Chrelashvili: The influence exercised by low temperatures on the state of the stratification in certain evergreens.
- 19) V. L. Menabde: Hybridization as one of the factors of the enrichment and renewal of the stock of types and species of Gruzija wheat.
- 20) T. S. Kezeli: The vitamin composition of the principal fodder plants of the meadows and hay fields of Gruzija.
- 21) L. F. Pravdin: The next tasks to be performed by forest selection in accordance with various natural conditions.
- 22) V. P. Volobuyev: Soil-climatic correlations and energetics

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A Meeting With the Biologists of the Transcaucasian Region.
Joint Session of the Biological Departments of Two Academies.

30-1-32/39

of soil formation.

23) E. M. Lavrenko: The Caucasus and the mountains of Central Europe in botanical and geographical respect.

24) A. L. Kharadze: On the history of mountain xerophyte vegetation of the Central Caucasus.

25) S. V. Zonn: Comparative characteristic of the red earth of Georgia and China.

26) V. G. Kazaryan: The principal points of the theory of the increasing contradiction in plant ontogenesis.

27) L. Sh. Davitashvili: The theory on the progress of evolution and the tasks of modern biology.

AVAILABLE: Library of Congress

1. Biology-Conference 2. Scientific reports

Card 4/4

NARIKASHVILI, S.P., BUTKHUZI, S.M.

Relationship between descending and ascending effects of the reticular formation of the medulla oblongata [with summary in English].
Fiziol. zhur. 44 no.9:848-858 S '58 (MIRA 11:12)

1. Institut fiziologii AN Gruzinskoy SSR, Tbilisi.
(MEDULLA OBLONGATA, physiol.
reticular form., relationship between ascending &
descending eff. (Rus))

NARIKASHVILI, Sergy Pavlovich; SARADZHISHVILI, P., red.; VOLKOVA, I.,
red.isd-va; TODUA, A., tekhn.red.

[Some problems in the physiology and pathology of the reticular
formation of the brain] Nekotorye voprosy fiziologii i pato-
logii setevidnoi formatsii golovnoogo mozga. Tbilisi, Izd-vo
Akad.nauk Gruz.SSR, 1959. 76 p. (MIRA 13:7)
(BRAIN)

NAATKASIVIL, S. P.

RESUMEN DE LAS COMUNICACIONES

The fact that the effects of paired stimulation of specific and nonspecific thalamic structures differ from those evoked by paired stimulation of skin receptors to these two thalamic different cortical areas must not appear different cortical areas.

Abstracts from the Proceedings of the 1st. Congress of Physiological Sciences, 8-9-15 Aug 1959, Havana, Cuba

Abstracts from the Proceedings of the 1st. Congress of Physiological Sciences, 8-9-15 Aug 1959, Havana, Cuba

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Abstracts from the Proceedings of the 1st. Congress of Physiological Sciences, 8-9-15 Aug 1959, Havana, Cuba

Abstracts from the Proceedings of the 1st. Congress of Physiological Sciences, 8-9-15 Aug 1959, Havana, Cuba

MARIKASHVILI, S.P.; MONIAVA, E.S.

Correlations between thalamocortical projection systems.
Zhur.vys.nerv.deiat. 9 no.3:461-470 My-Je '59. (MIRA 12:9)

1. Institute of Physiology, Georgian Academy of Sciences,
Tbilisi.

(CEREBRAL CORTEX - physiology)
(THALAMUS - physiology)

NARIKASHVILI, S.P., prof. (Tbilisi)

Function of the reticular formation of the brain stem and certain
clinical problems. *Klin.med.* 37 no.9:20-27 S '59. (MIRA 12:12)
(BRAIN STEM, anatomy and histology)

NARIKASHVILI, S.P.

Morphology and physiology of the reticular formation. *Fiziol.*
zhur. 45 no.11:1398-1399 N '59. (MIRA 13:5)
(BRAIN STEM physiol.)

BUTKHUZI, S.M.; NARIKASHVILI, S.P.

Significance of anesthesia in the inhibiting effect of the bulbar reticular formation on spinal activity. Biul. eksp. biol. med. 47 no.2:3-9 F '59. (NIRA 12:4)

1. Iz Instituta fiziologii AN Gruzinskoy SSR, Tbilisi. Predstavlena deystvitel'nym chlenom AMN SSSR I.S. Beritashvili.

(MEDULLA OBLONGATA, physiol.

reticular form., eff. of anesth. on inhib. eff. on spinal cord (Rus))

(ANESTHESIA, effects,

on inhib. eff. of medullar reticular form. on spinal cord (Rus))

(SPINAL CORD, physiol.

eff. of anesth. on inhib. eff. of medullar reticular form. (Rus))

NARIKASHVILI, S. P. (Tbilisi)

O korkovoy regulvatsii deyatel'nosti nespetsificheskikh obrazovaniy
golovnogo mozga

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

NARIKASHVILI, S. P.; MONIAVA, E. S.; KADZHAYA, D. V. (Tbilisi)

Vliyaniye retikulyarnoy formatsii na otvetnuyu aktivnost' vritel'noy afferentnoy sistemy.

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

ANTELDZE, B.F.; BUTKHUZI, S.M.; NARIKASHVILI, S.P.

Changes in breathing related to inhibition and facilitation of
signal reflexes during stimulation of the reticular formation.
Soob. AN Gruz. SSR 24 no. 1:81-88 Ja '60. (MIRA 14:5)

1. Akademiya nauk Gruzinskoy SSR, Institut fiziologii, Tbilisi.
Predstavleno akademikom I.S. Beritashvili.
(RESPIRATION)

MONIAYA, E.S.; NARIKASHVILI, S.P.

Effect of stimulation of thalamic unspecific nuclei on the cortical effects of specific nuclei. Soob.AN Gruz.SSR 25 no.5:605-612 II '60. (MIRA 14:1)

1. Akademiya nauk Gruz.SSR, Institut fiziologii, Tbilisi. Predstavleno akademikom I.S. Beritashvili.

(THALAMUS)

(CEREBRAL CORTEX)

NARIKASHVILI, S.P.

The 21st International Congress of Physiologists. Problems in the
physiology of subcortical formations of the brain. Fiziol. zhur.
46 no.3:371-378 Mr '60. (MIRA 14:7)
(BRAIN--CONGRESSES)

NARIKASHVILI, S.P.; BUTKHUZI, S.M.; MONIAVA, E.S.

Effect of the cerebral cortex on non specific thalamic reactions.
Fiziol. Zh. 46 no.6:653-663 Je '60. (MIRA 13:8)

1. From the Institute of Physiology, Academy of Sciences of the
Georgian Soviet Socialist Republic, Tbilisi.
(CEREBRAL CORTEX) (OPTIC THALAMUS)

84578

S/020/60/134/001/038/038/XX
B016/B060

17.2550

AUTHORS: Narikashvili, S.P., Moniava, E.S., and
Kadzhaya, D. V.

TITLE: Interaction Mechanism of Analyzers

PERIODICAL: Doklady Akademii nauk SSSR, 1960, Vol. 134, No. 1.
pp. 229 - 232

TEXT: The authors investigated the interaction mechanism of analyzers under combined skin- and light irritation. 15 non-narcotized cats, kept immobile by intravenous injections of tubocurarine, were the test specimens. The potentials were derived from the visual region and other regions of the cerebral surface and also from the external knee-joint region. Their recording was made with an electroencephalograph of trademark "Alvar". The skin of the "contra-lateral anterior leg" was irritated by individual electric pulses. After a 1-2% solution of sulphuric atropine both eyes were irritated with light flashes (1 m/sec) of constant brightness. Under the action of a more or less strong irritation, the corresponding reactions were suppressed both

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Interaction Mechanism of Analyzers

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in the visual area of the cortex and in the knee-joint region of the body. Fig. 1 shows an oscillogram obtained from such an experiment. The overall picture of the activity, caused by skinirritation, of the afferent visual system points to the fact that the suppressing action of one analyzer upon the other takes place on the subcortical level, because not only cortical reactions, but also the specific, thalamic reactions appear to be suppressed. When skin irritation is stopped, the corresponding potentials are restored with varying rapidity. In the visual region of the cortex and in the external knee-joint region this restoration runs in parallel and more or less exactly coincides with the restoration of the slow background activity, i.e., with the end of EEG desynchronization. Quite frequently, the degree of suppression of visual cortical reactions (under the effect of cortical irritations) is higher than that of the reactions of the knee-joint region (see oscillograms Figs. 2 and 3). The fact that the cortical reactions are more strongly suppressed than those of the nucleus thalami, seems to indicate that the suppression of the cortical potentials is not only explained by the action of the substantia reticularis upon the afferent paths up to the nuclei thalami, but also by a direct inhibiting action

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Interaction Mechanism of Analyzers

S/020/60/134/00:/038/038/XX
B016/B060

upon cortical neurons. This statement has been substantiated by experiments (Fig. 4). All changes in the corresponding potentials, which follow upon the interaction of different analyzers, are connected with the activation of the reticular system. The authors are at present carrying out a special experimental analysis to substantiate definitely their opinion of the varying effect of the reticular system upon the cortical potentials arising upon irritation of the eye and the knee-joint region. There are 4 figures and 15 references: 1 Soviet, 8 US, 1 British, and 1 French.

ASSOCIATION: Institut fiziologii Akademii nauk GruzSSR
(Institute of Physiology of the Academy of Sciences
GruzSSR) X

PRESENTED: February 8, 1960, by I. S. Beritashvili, Academician

SUBMITTED: January 8, 1960

Card 3/3

MONIAVA, E.S.; KADZHAYA, D.V.; NARIKASHVILI, S.P.

Mechanism of the influence of the reticular formation on responses from the visual region of the cerebral cortex. Zhur. vys. nerv. deiat. 11 no.5:868-877 S-0 '61. (MIRA 15:1)

1. Institute of Physiology, Georgian Academy of Sciences, Tbilisi.
(BRAIN) (CEREBRAL CORTEX) (REFLEXES)

NARIKASHVILI, S.P.; MONIAVA, E.S.

Interaction of specific and nonspecific thalamic nuclei. Trudy
Inst. fiziol. AN Gruz. SSR 12:55-67 '61. (MIRA 15:2)
(OPTIC THALAMUS)

NARIKASHVILI, S.P.; MONIAVA, E.S.; BUTKHUZI, S.M.

Effect of tetanic stimulation of the sensory-motor cortex on the thalamus relay nucleus. Fiziol. zhur. 47 no.7:863-871 J1 '61.

(MIRA 15:1)

1. From the Georgian S.S.R. Academy of Sciences Institute of Physiology, Tbilisi.

(CEREBRAL CORTEX) (OPTIC THALAMUS)

S/245/62/000/003/002/002
I015/I215

AUTHOR: Narikashvili, S.P.

TITLE: Problems of the physiology of analyzers based on modern data about the structure and function of the brain

PERIODICAL: Voprosy psikhologii no.3, 1962, 56-72

TEXT: Modern assessment of the role of the reticular formation conforms with Pavlov's view of the importance of "sub-cortex" for an adequate cortical function. In the brain stem it participates in activation, in regulation at the origin, and in propagation of the afferent impulses. The cortex itself participates in regulating the analyzing activity of CNS. Perception

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S/254/62/000/003/002/002
I015/I215

Problems on the physiology of...

and analysis are considered to be active processes that involve the participation of the reticular formation. An adequate correlated activity of the cortex and subcortical structure is necessary to ensure the integration of any higher nervous function. The reticular formation constitutes one of the most important subcortical structures. There are 108 references. ✓

Card 2/2

NARIKASHVILI, S.P., prof.; MONIAVA, E.S. (Tbilisi)

Changes in the electrical activity of the cerebral cortex in partial injuries of the brain stem. Vop.neirokhir. 25 no.1:26-33 '62. (MIRA 15:1)

1. Institut fiziologii AN Gruzinskoy SSR. 2. Chlen-korrespondent AN Gruzinskoy SSSR (for Narikashvili).
(BRAIN—WOUNDS AND INJURIES) (CEREBRAL CORTEX)
(ELECTROENCEPHALOGRAPHY)

NARIKASHVILI, S.P.; MONIAVA, E.S.

Dynamics of changes in the electric rhythms of the cerebral cortex following lesions of the reticular formation of the brain stem.
Soob. AN Gruz. SSR 28 no. 1: 81-88. Ja '62. (MIRA 1534)

1. Akademiya nauk Gruzinskoy SSR, Institut fiziologii, Tbilisi.
2. Chlen-korrespondent AN Gruzinskoy SSR (for Marikashvili).
(BRAIN--WOUNDS AND INJURIES)
(CEREBRAL C ORTEX) (ELECTROPHYSIOLOGY)