

BUZNIK, V.M., kand.tekhn.nauk dots.; VEZLOMTSEV, K.A., inzh.

Some results of the generalization of experimental data on the intensification of convective heat transfer processes. Izv. vys.ucheb.zav.; energ. 2 no.8:82-88 Ag '59. (MIRA 13:2)

1. Nikolayevskiy korablestroitel'nyy institut imeni admirala S.O.Makarova. Predstavlena kafedroy teorii toplotekhniki i sudovykh parovykh kotlov.

(Heat engineering)

69461

8(6) 24.5200

S/143/60/000/02/009/018
D043/D002

AUTHOR: Buznik, V.M., Candidate of Technical Sciences,
Docent Beziomtsev, K.A., Engineer

TITLE: A Generalized Equation of the Natural and Forced
Convection With External Flow Around Bodies \

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Energetika,
1960, Nr 2, pp 68-74 (USSR)

ABSTRACT: Based on an analysis of the heat exchange process and
the basic assumptions of the hydrodynamic theory of
heat exchange, experimental data on the heat exchange
of a cylinder, a sphere and a plate are generalized
within wide ranges of Reynold's and Grashof's num-
bers. It is shown that the heat exchange of natural
and forced convection is subjected to the same laws
and that it is possible to establish this law with
the aid of the Reynold's analogy. Equations for the ✓

Card 1/4

69461

S/143/60/000/02/009/018
D043/D002

A Generalized Equation of the Natural and Forced Convection With
External Flow Around Bodies

heat emission of a cylinder, a sphere and a plate are given. The heat exchange under conditions of natural and forced convection with external flow around bodies is satisfactorily determined by the

$$Nu = Nu_0 + 0.5 Re_s^{0.5} Pr^{0.25} + 0.01 Re_s^{0.8} Pr^{0.4} \quad (20)$$

where the Reynold's sum criterion Re_s is determined by the relationship

$$Re_s^2 = Gr + Re^2 \quad (10)$$

The analysis of the generalized heat exchange equation and experimental data show that the heat exchange depends to a considerable degree on the shape

Card 2/4

69461

S/143/60/000/02/009/018
D043/D002

A Generalized Equation of the Natural and Forced Convection With
External Flow Around Bodies

of the heated surface in the region of small values of Re and Gr numbers. In the region of Re or Gr 0.5 numbers $> 10^2$ the shape of the body has an insignificant influence. Papers of M.A. Mikheyev [Ref. 1], B.D. Katsnel'son and F.D. Timofeyeva [Ref 2], S.S. Kutateladze [Ref. 5], L.I. Kudryashev [Ref 7], o.A. Gerashchenko [Ref. 10], A.A. Zhukauskas [Ref. 12], B.S. Petukhov, A.A. Detlaf and V.V. Kirillov [Ref 15] are mentioned and their experimental and theoretical data are compared graphically. There are 3 graphs and 15 references, 10 of which are Soviet, 3 English and 2 German.

ASSOCIATION: Nikolayevskiy korablestroitel'nyy institut imeni admirala S.O. Makarova (Nikolayev Ship Building Institute imeni Admiral S.O. Makarov)

Card 3/4

69461

S/143/60/000/02/009/018
D043/D002

A Generalized Equation of the Natural and Forced Convection With
External Flow Around Bodies

SUBMITTED: August 6, 1959, by the Kafedra teorii teplotekhniki
i sudovykh parovykh kotlov (Department of the Theory
of Heat Engineering and Marine Boilers)

Card 4/4

39285

S/262/62/000/008/002/022
1007/1207

2A.508

AUTHORS: Buznik, V. M., Vezlomstsev, K. A. and Ryzhkov, S. V.

TITLE Experimental investigation of heat transfer and aerodynamic resistance in longitudinal flow around pipes provided with helical, strip-shaped ribs

PERIODICAL: Referativnyy zhurnal, otdel'nyy vypusk. 42. Silovyye ustanovki, no. 8, 1962, 14-15, abstract 42.8.63. "Tr. Nicolayevskogo korablestroit in-ta", no. 22, 1961, 3-9

TEXT: A system of two concentric ("telescopic") pipes was provided with ribs by applying a 1 mm helically wound strip around the external surface of the internal 10 mm-diameter pipe so that the resulting 16 flat ribs, arranged perpendicularly to the pipe surface, form cells of trapezoidal cross section between the concentric tubes. Both pipes and ribs are made of heat resistant steel. Investigations were carried out on pipes with a channel diameter of 24, 28 and 35 mm, a rib length of 6.75, 8.56 and 12.0 mm and a invariable rib width of 8 mm. As shown by the tests, helical strip-shaped ribs markedly increase the heat transfer at low Re numbers; with an increase in Re, the efficiency of the ribs diminishes, even attaining zero values at specific Re numbers. There are 10 figures and 3 references.

[Abstracter's note: Complete translation.]

4

Card 1/1

S/262/62/000/008/001/022
1007/1207

AUTHORS: Buznik, V. M., Vezlomtsev, K. A. and Ryzhkov, S. V.

TITLE: Experimental investigation of heat transfer and aerodynamic resistance of channels with internal ring-shaped ribs

PERIODICAL: Referativnyy zhurnal, otdel'nyy vypusk. 42. Silovyye ustanovki, no. 8, 1962, 14, abstract 42.8.62. "Tr. Nicolayevskogo korablestroit in-ta, no. 22", 1961, 19-23

TEXT: Tests were carried out on a channel representing a smooth, straight pipe 340 mm long and 27 mm in diameter. The pipe was provided with internal flat steel rings rigidly fastened by split steel-sleeves. A mercury thermometer and a baffle both mounted in front of the channel increased the flow turbulence at the channel inlet. During the tests the heat transfer was increased by a factor of 3.85. As shown by these tests, channels with flat ring-shaped ribs exhibit a higher resistance than smooth channels, while the variation of the resistance maintains the same course as in case of smooth pipes. The increase in heat transfer is accompanied by a nonproportional increase in resistance. There are 4 figures and 4 references.

[Abstracter's note: Complete translation.]

Card 1/1

S/143/62/000/007/003/003
D238/D308

AUTHORS: Buznik, V.M., Doctor of Technical Sciences, Prof.,
Vezlomtsev, K.A., Candidate of Technical Sciences
and Fedorovskiy, A.M., Engineer

TITLE: : Some results of an investigation into the hydro-
dynamic boundary layer on a flat plate

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Energetika,
no. 7, 1962, 94 - 100

TEXT: The velocity field in the boundary layer was in-
vestigated experimentally for laminar and turbulent air-flow conditions,
calculations being carried out, of the local and average coefficients of
frictional resistance, from the experimental data. The investigation was
carried out in an annular wind tunnel with an open working section where
the air velocity reached 60 m/sec. The working section of the aerodynamic
tube contained a surge chamber with a nozzle of rectangular section 200
x 200 mm, designed so that the velocity in the surge chamber would not
exceed 3 % of the air velocity from the nozzle. The plate was located

Card 1/2

S/143/62/000/007/003/003
D238/D308

Some results of ...

along the axis of flow at a distance 30mm from the nozzle. The experiments confirmed the known velocity distribution for laminar and turbulent air-flow conditions in the range of Reynolds numbers 6.4×10^4 to 1.5×10^5 . Experimental formulas are proposed for velocity profiles in the asymptotic boundary layer. The local mean coefficients of frictional resistance found from the profiles obtained, employing the Carman integral relation, are in good agreement with those recommended by other investigators. There are 5 figures. ✓

ASSOCIATION: Nikolayevskiy korablestroitel'nyy institut imeni admirala S.O. Makarova (Institute of Naval Construction im. Admiral S.O. Makarov)

SUBMITTED: November 17, 1961

Card 2/2

BUZNIK, Viktor Mikhaylovich; YENIN, V.I., kand. tekhn. nauk,
retsenzent; BABADZHANYAN, L.A., kand. tekhn. nauk,
retsenzent; GOL'DENFON, A.K., kand. tekhn. nauk, nauchn.
red.; SHAURAK, Ye.N., red.

[Marine steam boilers] Sudovye parovye kotly. Izd.2., dop.
i perer. Leningrad, Sudostroenie, 1964. 383 p.
(MIRA 17:8)

BUZNIK, V. M.; ARTEMOV, G. A.

"Heat transfer from a rotating disk with a protective shield."

report submitted for 2nd All-Union Conf on Heat & Mass Transfer, Minsk, 4-12
May 1964.

Nikolayevskiy Ship Building Inst.

BUZNIK, V. M.; BANDURA, V. N.

"The influence of roughness elements on heat transfer and aerodynamic drag of a heat-transfer surface."

report submitted for 2nd All-Union Conf on Heat & Mass Transfer, Minsk, 4-12 May 1964.

Nikolayevskiy Ship Building Inst.

BUZNIK, V. M.; FEDOROVSKIY, A. M.

"Heat transfer from rotating surfaces."

report submitted for 2nd All-Union Conf on Heat & Mass Transfer, Minsk, 4-12
May 1964.

Nikolayevskiy Ship Building Inst.

PUSHKIN, Nikita Ivanovich; BUZNIK, V.M., doktor tekhn. nauk,
prof., retsenzent; GASANOV, G.A., dots., retsenzent;
KUZNETSOV, N.M., nauchn. red.; SMIRNOV, Yu.I., red.

[Marine steam boilers; theory and calculations] Sudovye
parovye kotly; teoriia i raschety. Leningrad, Sudo-
stroenie, 1965. 510 p. (MIRA 18:7)

BUZNIK, V.M., doktor tekhn. nauk, prof.; ARTEMOV, G.A., inzh.;
BANDURA, V.N., inzh.; KARDASHEV, Yu.D., inzh.; FEDOROVSKIY, A.M.,
inzh.

Heat transfer from a flat disc rotating in an unbounded space.

Izv. vys. ucheb. zav.; energ. 9 no.1:84-86 Ja '66.

(MIRA 19:1)

1. Nikolayevskiy korablestroitel'nyy institut imeni admirala
S.O. Makarova. Predstavlena kafedroy teorii teplo tekhniki i
sudovykh parovykh kotlov. Submitted February 1, 1965.

L 38927-66 WWT(1) WEN
ACC.NR: AP6016912 (N) SOURCE CODE: UR/0143/66/000/001/0084/0086

AUTHOR: Buznik, V. M. (Doctor of technical sciences, Professor); Artemov, G. A. (Engineer); Bandura, V. N. (Engineer); Kardashev, Yu. D. (Engineer); Fedorovskiy, A. M. (Engineer)

ORG: Nikolayevskiy Ship-Building Institute im. Admiral S. O. Makarov
(Nikolayevskiy korablestroitel'nyy institut)

TITLE: Heat transfer from a flat disc rotating in an unlimited space

SOURCE: IVUZ. Energetika, no. 1, 1966, 84-86

TOPIC TAGS: heat transfer, turbulent heat transfer, heat transfer coefficient, *ROTATION*
ABSTRACT: To accumulate experimental data and to study the heat transfer at a constant thermal flux, the authors experimentally investigate the heat transfer from a rotating disc to moving air at a constant value of the specific heat flux at the surface. The disc-calorimeter was heated by an electrical heater placed inside it. The temperature of the disc surface was measured by copper-constantan thermocouples. The hot junctions of the thermocouples were embedded on the outside surface of the disc at various distances from the axis of rotation. The experimental device is shown schematically. The results of the experiments were compared with the data of other authors investigating heat transfer from a rotating

UDC: 536.244

ACC NR: AP6024642

SOURCE CODE: UR/0170/66/011/001/0105/0108

AUTHOR: Buznik, V. M.; Artemov, G. A.; Bandura, V. N.; Fedorovskiy, A. M.

ORG: Shipbuilding Institute im. Admiral S. O. Makarov, Nikolayev (Korablestroitel'nyy institut)

TITLE: Heat transfer of plate in turbulent region with constant superficial heat flux and isothermic wall

SOURCE: Inzhenerno-fizicheskiy zhurnal, v. 11, no. 1, 1966, 105-108

TOPIC TAGS: turbulent flow, heat transfer, heat transfer theory, isothermal flow

ABSTRACT: Numerous experimental studies of heat transfer are being conducted under conditions of either constant superficial heat flux or constant wall temperature. This raises the question: in what cases can data obtained under different experimental conditions be compared with each other. It has been shown experimentally that under turbulent flow conditions the heat transfer of tubes at constant wall temperature and heat flux are comparable, i.e., identical. The present article theoretically and experimentally gives a comparative evaluation of local heat transfer of a plate in turbulent air flow with wall temperature and surface heat flux in the turbulent region both constant. Results of processing the experimental data under all conditions are given as the test relationship $Nu_x = A Re_x^{0.8}$. ($Nu_x = \alpha x / \lambda$ and $Re_x = w_\infty x / \nu$ are local

Card 1/2

UDC: 536.25

ACC NR: AP6024642

values of Nusselt and Reynolds numbers; w - distance from beginning of plate heating to instantaneous section where heat transfer coefficient takes on value α ; w_{∞} - rate of creeping flow; K_{pc} - plate-calorimeter heat transfer.) Orig. art. has: 19 formulas and 1 figure.

SUB CODE: 20/ SUBM DATE: 10Feb66/ ORIG REF: 004/ OTH REF: 001

Card 2/2

ACC NR: AT7002848

(1/1)

SOURCE CODE: UR/3239/66/000/003/0003/0010

AUTHOR: Buznik, V. M.; Artemov, G. A.; Bandura, V. N.

ORG: none

TITLE: Investigation of heat transfer from a shielded rotating disk

SOURCE: Nikolayev. Korablestroitel'nyy institut. Sudostroyeniye i morskoye sooruzheniya, no. 3, 1966. Sudovyye energeticheskiye ustanovki (Ship power equipment), 3-10

TOPIC TAGS: heat transfer, heat transfer coefficient, gas turbine, turbine disk, turbine cooling

ABSTRACT: Heat transfer from the shielded rotating disk of a gas turbine has been theoretically and experimentally investigated. The temperature fields of the disk, which are characterized by individual heat-transfer coefficients on its surface, were determined from the relative momentum of the gas-core flow along the disk's surface and its radial rate of revolution. On the basis of an integral relationship for a flow between rotating disks (given by Karman), and assuming an analogy with flow conditions in a tube (according to J. Vannerus) and the linearity of a relative flow rate up to 40 m/sec, an expression for determining the gas-core flow rate along the disk's surface is derived. Calculated gas-flow rates for 5 disk radii show a linear relationship for which a simplified characteristic is given. The final formula for determining the local heat transfer contains a Reynolds-number approximation; it has

Card 1/2

ACC NR: AT7002848

been experimentally proved at 300—3000 rpm by a described disk-calorimeter. Curves are presented for the cooling-air motion from the center to the periphery of the disk and vice versa which show a good correlation between the theoretical formula and the experiment. The investigations determined the dependence of local heat transfer coefficients along the disk's radius on both the air consumption and the disk's rpm. Orig. art. has: 4 figures and 24 formulas.

SUB CODE: 21,20 / SUBM DATE: none/ ORIG REF: 002/ OTH REF: 002

Card 2/2

ACC NR: AT7002861

(N)

SOURCE CODE: UR/3239/66/000/003/0124/0126

AUTHOR: Buznik, V. M.; Artemov, G. A.; Bandura, V. N.; Fedorovskiy, A. M.; Kardashev, Yu. D.

ORG: none

TITLE: Method of measuring flow rates in rotating passages of marine turbines by means of metric pressure gages

SOURCE: Nikolayev. Korablestroitel'nyy institut. Sudostroyeniye i morskaya sooruzheniya, no. 3, 1966. Sudovyye energeticheskiye ustanovki (Ship power equipment), 124-126

TOPIC TAGS: flow rate, flow velocity, gas turbine, turbine cooling, gas turbine engine, marine engine

ABSTRACT: A method for cooling the parts of marine gas turbines is based on various experimental investigations, including studies of gas and cooling-air flow in rotating passages. An arrangement is described for determining the flow characteristics (flow rate and pressure) in the clearance between a gas-turbine disk and a screen rotating along with it, by which a pressure-sensitive directional probe and a traversing micro-pitot probe is used. The probes are shown and their operation is described. By inserting the directional probe into the disk-screen clearance through holes located in the screen at several distances from the center, the flow rate in the flow core can

Card 1/2

UDC: none

ACC NR: AT7002861

be measured. The pressure field across the section of the clearance is measured with the pitot tube. The arrangement for pressure transmission consists of a hollow shaft rotating inside the stator and provided with measuring chambers hermetically sealed by water chambers. The described method is reliable in operation and improves the accuracy of flow rate measurements. Orig. art. has: 3 figures.

SUB CODE: 13, 21/ SUBM DATE: none/ ORIG REF: 001/

Card 2/2

ACC NR: AT7002849 (N) SOURCE CODE: UR/3239/66/000/003/0011/0017

AUTHOR: Buznik, V.M.; Kardashev, Yu.D.

ORG: *YANL*

TITLE: Investigation of heat transfer during the surface boiling and forced motion of seawater

SOURCE: Nikolayev. Korablestroitel'nyy institut. Sudostroyeniye i morskoye sooruzheniya, no. 3, 1966. Sudovyye energeticheskiye ustanovki (Ship power equipment), 11-17

TOPIC TAGS: heat transfer, convective heat transfer, heat exchanger, heat transfer rate, *sea water, calorimeter, boiling*

ABSTRACT: The heat transfer of seawater in the presence of surface boiling and forced motion is described by a system of differential equations, which lead to criteria for which a function containing the properties of vapor bubbles is presented. This function is experimentally demonstrated on cleaned water distillate and sea water by the use of a calorimetric apparatus. As shown, the results of these experiments with water distillate boiling in the presence of underheating correspond with data obtained by other authors. It is shown that the forced-motion velocity

Card 1/2

UDC: none

ACC NR: AT7002849

significantly affects heat transfer only within the limits of convective heat transfer without boiling and does not influence its intensity during developed surface boiling. An increased underheating rate, up to the saturation temperature, affects heat transfer significantly. An analysis of experimental results led to a parametric equation which generally characterizes the heat transfer of a water distillate during surface boiling. Several series of experiments with sea water were carried out under the following conditions: a surface heating of 0.2×10^6 to 3×10^6 Kcal/m²hr; a forced flow rate of 0.2 to 0.8 m/sec; underheating up to saturation temperatures of 28, 56, and 83C; and a 0 to 4% solute concentration. The graphically represented results are generalized by a parametric equation which provides a criterion for the heat transfer of underheated sea water subject to surface boiling and forced motion. The close relationship between the investigated heat transfer, of heat transfer in the presence of surface oscillations, and Reynolds criteria, indicates that vapor bubbles greatly intensify heat transfer. [GE]

SUB CODE: 08, 20/ SUBM DATE: none/ ORIG REF: 006/ ATD PRESS: 5114

Card 2/2

PROSHLYAKOV, A.I.; ZHELEZNYKH, V.I.; BYCHEVSKIY, B.V.; ZOTOV, V.F.;
LYAMIN, N.I.; IVANOV, D.S.; BLAGOSLAVOV, B.V.; BARANOV, N.P.
PANKOV, M.A.; OGORODNIKOV, V.A.; FILONENKO-BORODICH, M.M.;
IL'YASEVICH, S.A.; RABINOVICH, I.M.; OLISOV, B.A.; DAVYDOV,
S.S.; ZIMIN, D.D.; SHPERK, B.F.; USKOV, V.N.; BUZNIK, P.K.

Boris Aleksandrovich Olivetskii; obituary. Voen.-inz.h.zhur.
101 no.12:42 D '57. (MIRA 10:12)
(Olivetskii, Boris Aleksandrovich, 1896-1957)

BUZNIKOV, A.A.; MIRKIN, M.S.

Introducing a machine for jacketing caps of carding machines.
Biul.tekh.-ekon.inform.Gos.nauch.-issl.inst.nauch.i tekhn.inform.
18 no.11:49-50 N '65. (MIRA 18:12)

L 64317-65 BT(1)

ACCESSION NR: AP5020216

UR/0170/65/009/001/0070/0076

536.3:535.34

AUTHOR: Buznikov, A. A., Kozyrev, B. P.

TITLE: Investigation of atmospheric absorption of radiation from a weakly heated
absolutely black emitting body 21.44.55

SOURCE: Inzhenerno-fizicheskiy zhurnal, v. 9, no. 1, 1965, 70-76

TOPIC TAGS: black body radiation, heat absorption, atmospheric thermodynamics

ABSTRACT: A study was made of the passage of radiation from a black body through a horizontal atmospheric layer at distances up to 2000 meters, under field conditions. Source of radiation was a multichamber black body with a radiating area diameter of 500 mm. The receiver was a vacuum compensated thermoelement with a window made of KRS-5 crystal, and the receiving areas of the thermoelement had a diameter of 1 mm. For distances up to 125 meters a short focus optical system was used. Under the experimental conditions the temperature of the emitting black body was held constant with an accuracy up to $\pm 0.1^\circ$.

Cord 1/2

L 64317-65

ACCESSION NR: AP5020216

Twenty to thirty experimental points were obtained at distances from 25 to 2000 meters and for periods of time from 50 min to 1 hour. 20 points were obtained. In addition there were determined the temperature of the air, the relative humidity of the atmosphere, pressure, and the relative moisture content and the thickness of the precipitated layer of water. It was found that a change in the temperature of a black body from 23 to 560 K leads to a shift of the radiation energy towards the side of short wave lengths. The black body has a wide radiation spectrum. For example, 65% of the energy of an absolutely black body, having a temperature of 323 K, is given off over a range of wave lengths from 2 to 40 microns. The document has: 1 formula and 3 figures

ASSOCIATION: Elektrotekhnicheskii institut im. V. I. Ul'yanova-Lenina, g. Leningrad (V. I. Ul'yanov-Lenin Electrotechnical Institute)

SUBMITTED: 24Nov64

ENCL: 00

SUB CODE: TD, E5

NR REF SOV: 004

OTHER: 000

Cord 2/2 ✓

ACC NR: AP7002666

SOURCE CODE: UR/0109/67/012/001/0087/0092

AUTHOR: Kozyrev, B. P.; Buznikov, A. A.; Loshakova, V. V.

ORG: none

TITLE: Transparency of oxide coating of cathodes in electron tubes

SOURCE: Radiotekhnika i elektronika, v. 12, no. 1, 1967, 87-92

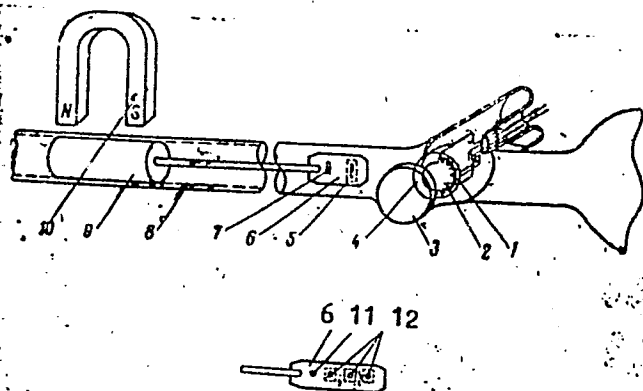
TOPIC TAGS: alkaline earth oxide, electron tube cathode, transparency

ABSTRACT: The transparency of oxide-coating samples prepared from (Ba, Sr, Ca) CO₃ subjected to the conventional nickel-backing cathode calcination was measured in a special 10⁻⁶-torr vacuum device (see figure). Parts: 1 - thermo-electric converter, 2 - its receiving area, 3 - inlet window, 4 - shield, 5 - oxide coating, 6 - nickel plate, 7 - slit, 8 - calibrated tube, 9 - iron cylinder, 10 - magnet, 11 - open port, 12 - oxide-covered ports. The spectral transparency of the coating was measured, at wavelengths within 1.5-9 μ, by an IKS-12 spectrometer on samples 60-, 120-, 180-μ thick (density, 1.3 g/cm³). Also, the integral transparency for black-body radiation at 500-1000C was determined. The results are

UDC: 621.385.032.001.512

Card 1/2

ACC NR: AP7002666



Special vacuum device for measuring
transparency of oxide coating

shown graphically. Although the transparencies were measured at room temperature, the results are regarded as applicable to hot-cathode operating conditions (600–900C) on the basis of recent U. P. Oppenheim et al. experiments (J. Opt. Soc. Am., 1964, 54, 1, 127). "In conclusion, the authors wish to thank V. S. Parkhomenko for his help in selecting test specimens." Orig. art. has: 4 figures.

SUB CODE: 09 / SUBM DATE: 14Jul65 / ORIG REF: 005 / OTH REF: 004

Card 2/2

BUZNIKOV, G.A.

Chemical Abst.
Vol. 48 No. 8
A pr. 25, 1954
Biological Chemistry

②
✓ Activity and probable functional activity of hyaluronidase in various stages of ontogenesis in fish. Kh. S. Kosh-toyants and G. A. Buznikov (M. V. Lomonosov State Univ., Moscow). *Doklady Akad. Nauk S.S.S.R.* 93, 937-40(1953).—In some fish eggs the hyaluronidase activity remains constantly low after fertilization for about 20 hrs. after which it rises rapidly until hatching, then rapidly drops. In other fish two max. are observed. Permeability of the embryonic structure is a direct function of this enzyme; in CdCl₂ soln. which blocks the SH groups the egg development is normal until hatching, when the embryos die rapidly at the time of the rise of hyaluronidase activity. The alteration of permeability of the structure of the embryo appears to be the true function of this enzyme.

G. M. Kosolapoff

Inst. Animal Morphology, AS USSR

BUZNIKOV, G.A.

BUZNIKOV, G.A.

Вопросы физиологии и биохимии развития рыб

Materials on the physiology and biochemistry of the development of
eggs of bony fishes. Vop.ikht.no.3:104-125 '55. (MLRA 8:11)

1. Kafedra fiziologii zhivotnykh Moskovskogo universiteta imeni M.V.
Lomonosova

(Embryology--Fishes)

BUZNIKOV, G. A.

BUZNIKOV, G. A. -- "The Age Dynamics of the Activity and Condition of the Secretion of Hyaline and Hatching Ferment in the Embryonic Development of Bony Fish." Acad Sci USSR, Inst of Animal Morphology imeni A. N. Svertsov, Acad Sci USSR, Moscow, 1956. (Dissertation for the Degree of Candidate of Biological Sciences)

SO: Knizhnaya Letopis' No 44, October 1956

Buznikov, G.A.

BUZNIKOV, G.A.

Physiology of hatching glands in the embryos of bony fishes. Zhur.
ob.biol. 18 no.5:350-359 S-O '57. (MORA 1P:11)

1. Institut morfologii zhivotnykh AN SSSR.
(TELEOSTEI) (EMBRYOLOGY--FISHES) (GLANDS)

BUZNIKOV, G.A.

20-6-58/59

AUTHOR:
TITLE:

BABURINA, Ye. A., BUZNIKOV, G.A.
Hatching glands of the Embryos of the Kuban Bream Vimba Vimba Macu-
lata as a Source of Hyaluronidase and of the Hatching Enzyme.
(Zhelezy vylupleniya embriionov kubanskogo rybtsa kak istochnik gila-
lurenidazy i fermenta vylupleniya. Russian).
Doklady Akademii Nauk SSSR, 1957, Vol 113, Nr 6, ppa 1387 - 1390
(U.S.S.R.)

PERIODICAL:

ABSTRACT:

Special ferments which loosen the egg-membrane take part in the hatching of embryos of many animals. In the case of esseans the hatching ferment is excreted by 1-cellular ektodermal glands, the so-called hatching glands. These glands were believed to produce also another ferment into the perivitellin fluid: the hyaluronidase (kind I - dark red, kind II - light blue). The authors studied the development of the hatching glands of the Kuban vimba vimba maculata as well as the dynamics of the activity according to the age of this ferment and, finally, of the hatching ferment. An exact coincidence between the results of the histological and physiological studies of the hatching glands of the vimba vimba maculata became evident. The accumulation of hyaluronidase in the body of embryos always coincides with the accumulation of secretion kind I in the hatching glands. Together with the entrance of hyaluronidase into the perivitellin fluid the freeing of the hatching glands of the secretion kind I is ob-

Card 1/3

...the hatching ferment is excreted

20-6-58/59

Hatching Glands of the Embryos of the Kuban Bream Vimba Vimba Macu-
lata as a source of Hyaluronidase and of the Hatching Enzyme.

ASSOCIATION: Institute for Animal Morphology "A.M. SEVERTSOV" of the Academy of
Science of the USSR.
(Institut morfologii zhivotnykh im A.M. SEVERTSOVA Akademii Nauk
SSR.

PRESENTED BY: SHMAL'GAUZEN, I.I., Member of the Academy.

SUBMITTED: 11 December 1956

AVAILABLE: Library of Congress

Card 3/3

BUZNIKOV, G.A.

Materials on the hatching physiology of bony fishes. Trudy sov. ikht. kom.
no. 8:421-426 ' 58. (MIRA 11:11)

1. Institut morfologii zhivotnykh AN SSSR.
(Embryology--Fishes) (Enzymes)

BOZNIKOV, G.A., IGNAT'YEVA, G.M. (Moskva)

Hatching enzymes. Usp.sovr.biol. 46 no.3:337-356 H-D '58
(MIRA 11:12)

(ENZYMES)
(EMBRYOLOGY)

17(1)

AUTHOR:

Buznikov, G. A.

SOV/20-125-5-59/61

TITLE:

The Influence Exercised by Egg-Membranes on the Development of Embryos of *Misgurnus fossilis* (Vliyaniye yaytsevykh obolochek na razvitiye embrionov v'yuna)

PERIODICAL:

Doklady Akademii nauk SSSR, 1959, Vol 125, Nr 5, pp 1170-1173 (USSR)

ABSTRACT:

The egg-membranes of Teleostae may apart from their necessary functions influence the metabolism between the embryo and its environment under specific ecological conditions (Refs 1-6). The egg-membranes of the sea salmon begin only before slipping out to suppress the respiration (Ref 6). The author obtained the keeping back of the embryos within the membranes by the inactivation of the ferment which promotes the hatching. This ferment can be inactivated in vitro by the ovomucoid of protein or by albumin solutions in the case of *Misgurnus fossilis* (in contrast to that of other Teleostae, Ref 5). Shortly before the beginning of hatching the spawn portions (100 eggs in each) were laid either into Petri dishes filled with water or with inhibitor solution (0.25-0.5% ovomucoid or 6-12% protein). The same conditions were

Card 1/4

The Influence Exercised by Egg-Membranes on the Development SCV/20-125-5-59/61
of Embryos of *Misgurnus fossilis*

caused to prevail for embryos of the same age as the experimental spawn which were extracted from the membranes. The egg-membranes of *Misgurnus fossilis* cannot be penetrated by the ovomucoid. Therefore they were pierced before the experiment. Through this small aperture the inhibitor reached the perivitelline space. Since this was carried out in advance the ferment promoting the hatching was inactivated immediately after its secretion into the perivitelline space. This inhibited the slipping out of the experimental embryos. Figure 1 shows the deformations the embryos suffered in consequence of the retarded hatching. Table 2 shows the influence of the rate of oxygen exercised upon the state of the embryos artificially kept back in the egg-membranes. The obtained experimental results showed that the "inhibiting" influence of the membranes can be completely compensated up to a certain stage of development by a better oxygen supply. This stage coincides with that of the mass hatching in the case of a saturation of 100% of the water with oxygen. This is the last potentially possible stage of normal hatching (Ref 5). The deteriorated aeration accelerates the occurrence of the "inhibiting" influence of the membranes and shifts accordingly the moment of

Card 2/4

The Influence Exercised by Egg-Membranes on the Development SOV/20-125-5-59/61
of Embryos of *Misgurnus fossilis*

slipping out. If the ferment promoting the hatching is inactivated the embryos cannot leave the membranes so that the "inhibiting" influence of these structures is fully effective. Similar disturbances of the development may be caused as well by the reduction of the partial pressure of the oxygen to 20-40 mm Hg col. (Fig 1 V : b). Since the substances solved in water, among them oxygen, pass the egg-membranes by means of diffusion (Ref 8), the oxygen tension in the perivitelline space of a living fish egg is always lower than in the surrounding water. This is the most important fact in the case of hatching as well. The reduction of the O_2 -partial pressure in the perivitelline liquid is known to be an adequate stimulus which causes the secretion of the ferment promoting the hatching of fish. After the embryos have passed the latest potentially possible stage of hatching the unfavorable influence of the membranes can no more be compensated by an improved oxygen supply. The dying of the embryos can be caused apparently not only by the rate of O_2 but also by another mechanical action of the membranes. There are 1 figure, 1 table, and 8 references, 4 of which are Soviet.

Card 3/4

The Influence Exercised by Egg-Membranes on the Development SOV/20-125-5-59/61
of Embryos of *Misgurnus fossilis*

ASSOCIATION: Institut morfologii zhivotnykh im. A. N. Severtsova Akademii nauk
SSSR (Institute of Animal Morphology imeni A. N. Severtsov of the
Academy of Sciences USSR)

PRESENTED: December 27, 1958, by A. N. Bakulev, Academician

SUBMITTED: December 20, 1958

Card 4/4

17(1)

SOV/20-125-6-58/61

AUTHOR: Buznikov, G. A.

TITLE: On the Functional Role of Hyaluronidase in the Spawn of Teleostei
(O funktsional'nom znachenii gyaluronidazy v ikre kostistyykh ryb)

PERIODICAL: Doklady Akademii nauk SSSR, 1959, Vol 125, Nr 6, pp 1382-1385
(USSR)

ABSTRACT: The embryos of all investigated teleosts (with the exception of those of *Misgurnus fossilis*), after having reached a certain development stage, secrete a ferment - hyaluronidase - into the perivitteline liquid (Refs 1-3). For the present moment, its functions in the spawn cannot yet be looked upon as definitely established. As is well known, hyaluronidase is accumulated as part of the so-called hatching glands. It is only in the perivitteline region that it begins to play its functional role (Refs 3,4). For the clarification of the physiological role of this ferment, the author carried out experiments with carp-like fishes: *Abramis vimba* and *shemaya* from the Sea of Azov. In the developing spawn, hyaluronidase was either inactivated (by means of trypan blue), or the egg membranes were artificially

Card 1/4

SOV/20-125-6-58/51

On the Functional Role of Hyaluronidase in the Spawn of Teleostei

removed before the onset of ferment secretion. The work was carried out in the fish hatchery "Goryachiy Klyuch" (Krasnodarskiy kray, river Psekups). It was found that hyaluronidase inactivation entails accelerated hatching (as compared with the controls) (Fig 1). In this process, no development disturbances could be noticed. Even the embryos whose egg membranes had been removed showed completely normal development in water and in a trypan-blue solution. However, the same experiment (series II) in embryos at the stage of 8-10 tail segments resulted in certain development disturbances, though only after the stage that corresponds to the 1st secretion of hyaluronidase into the perivitteline liquid: the onset of blood circulation was delayed, and edema often developed in the pericardial region (Fig 2a). Such embryos hatched earlier than the controls, and the above-mentioned disturbances eventually disappeared. At later stages of embryo development, eye pigmentation was delayed, and the embryos were somewhat lagging behind in their development. The removal of hyaluronidase by the taking-off of the egg membranes does not interfere with normal development (Fig 2b). If the oxygen partial pressure in water is raised to

Card 2/4

507/20-125-6-58/61

On the Functional Role of Hyaluronidase in the Spawn of Teleostei

120 mm mercury, said disturbances in a trypan-blue solution are reduced. At 140-150 mm pressure the development apparently takes a perfectly normal course. Apart from the above-mentioned inactivation (Refs 5,6), trypan-blue also has a teratogenic effect on the embryos (Refs 7,8). It is, however, not this effect, but ferment inactivation that, in the present case, seems to account for the development disturbance, since trypan-blue apparently is unable to penetrate the embryonic blastoderm. By way of conclusion, the results are interpreted and the possible role played by hyaluronidase in the hatching process is discussed. There are 2 figures and 9 references, 5 of which are Soviet.

ASSOCIATION: Institut morfologii zhivotnykh im. A. N. Severtsova Akademii nauk SSSR (Institute of Animal Morphology imeni A. N. Severtsov of the Academy of Sciences USSR)

PRESENTED: December 27, 1958, by A. N. Bakulev, Academician

Card 3/4

77 (1)

AUTHORS:

Manukhin, B. N., Buznikov, G. A.

SOV/20-127-4-59/60

TITLE:

Quantitative Investigation of Adrenalin and Noradrenalin in the Adrenal Glands of Chicken Embryos

PERIODICAL:

Doklady Akademii nauk SSSR, 1959, Vol 127, Nr 4, pp 934 - 936 (USSR)

ABSTRACT:

The quantitative investigation of the mediators of the nervous system of growing embryos is necessary for the explanation of an important physiological problem, namely the growth of the regulatory mechanism in the course of ontogenesis. Despite the existence of a considerable number of papers dealing with the system acetyl-cholin-cholesterinase the variations of adrenal-in-like substances with age are but little investigated and the methods used not very sensitive (Refs 1-6). The authors investigated the problem mentioned in the title histochemically and chemically. Figures 1 and 2 show the results of adrenalin determination. Its traces can be seen in the adrenal gland as soon as on the ninth day of incubation; determinable quantities appear on the tenth day. The rate of growth increases from the 12th to the 16th day. From the 17th to the 19th day the relative and absolute content of adrenalin increases rapidly.

Card 1/3

Quantitative Investigation of Adrenalin and Noradrenalin SOV/20-127-4-59/60
in the Adrenal Glands of Chicken Embryos

During the 20th day of incubation the absolute content remains unchanged whereas the relative content decreases (because of the increasing weight of the adrenal glands). Together with the hatching of the chicken (21st - 22nd day) the adrenalin content reaches its record maximum. The determinable quantities of noradrenalin appear on the 10th - 12th day of incubation. In some cases the quantity of noradrenalin exceeds that of adrenalin 2-3 times. The quantity of noradrenalin may vary considerably whereas the quantity of adrenalin is constant for several stages of development. The histochemical results (Fig 3) are in complete accordance with the chemical ones mentioned above. The results obtained by the authors differ from those mentioned in the present publications (Refs 1-6). The authors can as yet not decide whether the age curve (Fig 1) of adrenalin content reflects only its synthesis in the adrenal glands or expresses a saldo of the processes: synthesis and discharge of adrenalin from the adrenal glands into the blood. Sudden fluctuations of the noradrenalin content do not seem to influence the adrenalin content. Hence, it may be concluded

Card 2/3

Quantitative Investigation of Adrenalin and Noradrenalin SO7/20-127-4-59/60
in the Adrenal Glands of Chicken Embryos

that the disappearance of considerable quantities of noradrenalin is caused by its discharge into the blood and not by a transformation into adrenalin. During the whole period observed there are less cells in the adrenal gland which can be colored to noradrenalin than those which show a color reaction to the entire catechol-amine. Thus, adrenalin is present in most of these cells. It may be assumed from the distribution of the cells containing noradrenalin (Fig 3) that in the course of embryonic development not only the intensity of the synthesis of biogenic amines is changed but also the functional differentiation of the cells synthesizing these substances. There are 3 figures and 9 references.

ASSOCIATION: Institut morfologii zhivotnykh im. A. N. Severtsova Akademii nauk SSSR (Institute of Animal Morphology imeni A. N. Severtsov of the Academy of Sciences, USSR)

PRESENTED: April 6, 1959, by A. N. Bakulev, Academician

SUBMITTED: April 3, 1959
Card 3/3

BUZNIKOV, G.A.; MANUKHIN, B.N.

Effect of serotonin on embryonic motor activity in nudibranchiate mollusks. Zhur. ob. biol. 21 no.5:347-352 S-0 '60. (MIRA 13:9)

1. Institute of Animal Morphology, Academy of Sciences of the U.S.S.R., Moscow.

(SEROTONIN)

(EMBRYOLOGY—MOLLUSKS)

MANUKHIN, B.N.; BUZNIKOV, G.A.

A new biological method for quantitative determination of
serotonin. Fiziol. zhur. SSSR 46 no. 9:1160-1163 S '60.
(MIRA 13:10)

1. From the Laboratory of General and Comparative Physiology,
Severtsov Institute of Animal Morphology, Moscow.
(SEROTONIN) (BIOLOGICAL ASSAY)

BUZNIKOV, G.A.

Hyaluronidase and the hatching enzyme in the embryogenesis of bony fishes. Trudy Inst.morf.zhiv. no.33:173-218 '61. (MIRA 14:6)
(Enzymes) (Embryology--Fishes) (Oxygen--Physiological effect)

BUZNIKOV, G.A.; MANUKHIN, B.N.

A serotoninlike substance in the embryogenesis of some gastropods.
Zhur. ob. biol. 22 no.3:226-232 My-Je '61. (MIRA 17:5)

1. Institute of Animal Morphology, U.S.S.R. Academy of Sciences.
(SEROTONIN) (EMBRYOLOGY—MOLLUSKS)

BUZNIKOV, G.A.; MANUKHIN, B.N.

An "inhibitory ~~substance~~" in mollusk embryos and its role in the control of embryonic motility. Dokl. AN SSSR. 144 no.6:1414-1417 Je '62. (MIRA 15:6)

1. Institut morfologii zhivotnykh im. A.N.Severtsova Akademii nauk SSSR. Predstavleno akad. A.N.Bakulevym.
(Embryology--Mollusks) (Movement (Physiology))

MANUKHIN, B.N.; BUZNIKOV, G.A.

Effect of an "inhibitory substance" in mollusk embryos on
isolated organs of vertebrates. Dokl. AN SSSR 145 no.1:225-
228 J1 '62. (MIRA 15:7)

1. Institut morfologii zhivotnykh imeni A.N. Severtsova AN SSSR.
Predstavleno akademikom A.N. Bakulevym.
(Embryology--Mollusks) (Movement (Physiology))

MANUKHIN, B.N.; BUZNIKOV, G.A.

Serotonin in the embryogenesis of marine invertebrates. Zhur.
ob. biol. 24 no.1:23-29 Ja-F'63 (MIRA 16:11)

1. Laboratory of General and Comparative Physiology, Institute
of Animal Morphology, Academy of Sciences of the U.S.S.R.

*

BUZNIKOV, G.A.; CHUDAKOVA, I.V.

Serotonin in developing embryos of the sea urchin *Strongylo-*
centrotus droëbachiensis. Dokl. AN SSSR 152 no.4:1014-1016 0 '63.
(MIRA 16:11)

1. Institut morfologii zhivotnykh im. A.N. Severtsova AN SSSR.
Predstavleno akademikom A.N. Bakulevym.

✓

BUZNIKOV, G.A.

Use of tryptamine derivatives for studying the role of 5-oxytryptamine (serotonin) in the embryonic development of invertebrates. Dokl. AN SSSR 152 no.5:1270-1272 0 '63. (MIRA 16:12)

1. Institut morfologii zhivotnykh im. A.N.Severtsova AN SSSR.
Predstavleno akademikom A.N.Bakulevym.

✓

GURVICH, A.Ye.; ENGEL'GARDT, V.A., akademik, glav. red.; DEBORIN,
G.A., zam. glav. red.; ZIL'BER, L.A., prof., red.;
BUZNIKOV, G.A., red.

[Virology and immunology; problems of general virology,
structure and biosynthesis of antibodies] Virusologiya i
immunologiya; problemy obshchei virusologii, struktura i
biosintez entitel. Moskva, Nauka, 1964. 274 p.
(MIRA 18:1)

1. Deystvitel'nyy chlen AMN SSSR (for Zil'ber).

BUDNIKOV, G.A.; VERZHNINSKAYA, N.A.; MANOYLOV, S.Ye.; KREPAKH, S.A.;
POGLAZOV, B.F.; SEVERIN, S.Ye.

International symposium on molecular cellular physiology in
Berlin and the annual meeting of biochemists in Jena. Vop.
med. khim. 10 no.1:95-103 Ja-F '64.

(MIRA 17:12)

CHUDAKOVA, I.V.; BUZNIKOV, G.A.

Probable participation of acetylcholine in early embryogeny of
Echinodermata. Zhur. evol. biokhim. i fiziol. 1 no. 6:557-563
N-D '65 (MIRA 19:1)

1. Laboratoriya obshchey i sravnitel'noy fiziologii imeni
Kh.S. Koshtoyantsa Instituta morfologii zhivotnykh imeni A.N. Se-
vertsova AN SSSR, Moskva. Submitted February 10, 1964.

BUZNIKOV, G.A.; ZHEREBCHENKO, P.G.; CHUDAKOVA, I.V.

Effect of various indolylalkyl amines on the motor cells of mollusk embryos and the vessels of rabbit ear. Biul. eksp. biol. i med. 59 no. 5: 59-63 '65. (MIRA 18:11)

1. Laboratoriya obshchey i sravnitel'noy fiziologii (zav. T.M. Turpayev) Instituta morfologii AN SSSR, Moskva. Submitted October 4, 1963.

BUENIKOV, Ye. F. Cand Tech Sci

Dissertation: "Investigation of the
Performance of Vertical Centrifugal Steam
Separators."

22/6/50

Power Engineering Inst in emi G. G. Krzhizharovskiy.

SO Vecheryaya Moskva
Sum 71

BUZNIKOV, Yevgeniy Fedorovich; RODDATIS, Konstantin Fedorovich;
~~SPEYSNER, Vladimir Anátol'yevich; KHITRIN, L.N., red.;~~
MURZAKOV, V.V., red.

[Conversion of DKV and DKVR boilers to gas operation]
Perevod kotlov DKV i DKVR na gazoobraznoe toplivo. Mo-
skva, Energiia, 1964. 190 p. (MIRA 17:12)

1. Chlen-korrespondent AN SSSR (for Khitrin).

BUZNIKOV, Ye.F., kand. tekhn. nauk

Water-heating gas-mazut boilers operating on gas-mazut designed
by the Main All-Union Installation Trust of the Ministry of
Electric Power Plants of the U.S.S.R. Nov. tekhn. zhil.-kom. khoz.:
Elek. i tepl. gor. no.5:121-136 '64.

(MIRA 18:2)

1. Trest "TSentrceenergmontazh".

BUZNIKOV, Yevgeniy Fedorovich; SIDOROV, Vladimir Nikolayevich
[deceased]; Prinsipal. uchastiye KODDATIS, K.F.; ROZANOV,
M.S., red.

[Water heating boilers and their use in electric power
plants and steam power plants] Vodogreinye kotly i ikh
primeneniye na elektrostantsiyakh i v kotel'nykh. Moskva,
Energiia, 1965. 239 p. (MIRA 18:9)

BUZNIKOV Yel F

F

M

1439. INCREASING STEAM OUTPUT OF EXISTING BOILERS. Buznikov, E.F.
(Za Ekon. Topliva (Fuel Econ.), Aug. 1961, 1-7). Suggestions are made
for rearranging the tubes of water-tube boilers so that the screen tubes
do not join the top drum but form an independent circuit with vertical
steam separators, from which the steam goes to the superheater. (L).

BUZNIKOV, Ye.F.

F

M

1398. ANALYSIS OF PERFORMANCE AND CHOICE OF TYPE AND DIMENSIONS FOR VERTICAL CENTRIFUGAL STEAM SEPARATORS. Buznikov, E. (En Ekon. Topliva (Fuel Econ.), Oct. 1951, 8-14). Data show that the most effective type of separator is that with two levels. Such a separator enables the load of steam space to be intensified and guarantees high steam purification. Satisfactory steam quality in separators with direct feed at the level entails an appreciable increase in steam-space-height, which may not be economically justified. Analysis of performance of various types of separator permits the suitability of a particular type to be assessed and the essential constructive dimensions (height and diameter) to be determined. (L).

E.E.A.

BUENINOW, Y.M.

Distinction for conductance of hydroxyethylamine salts.
Radiatskh. i elektron. 10 no. 11. 1975. 1 p.

(MIRA 18:10)

BUZNITSKIY, A.G., Geroy Sotsialisticheskogo Truda

Possibilities of increasing yields. Zemledelie 26 no.5:
30-33 My '64. (MIRA 17:6)

1. Predsedatel' kolkhoza imeni Zhdanova, Kiyevskoy oblasti.

1ST AND 2ND DEGREE																										3RD AND 4TH DEGREE																																																																																																																																														
PROCESSES AND PROPERTIES INDEX																																																																																																																																																																								
BUZNITSKIY, A. L.																																																																																																																																																																								
CN										17																																																																																																																																																														
<p>Post-harvesting treatment of <i>Nicotiana rustica</i> for the production of citric acid. A. L. Buznitskiy, <i>Trudy Nauch.-Issledovatel. Inst. Tabak. T. Mskoroch. Prom. No. 124, 17-44(1938)</i>.—With the prolongation of the after-ripening period the quantity of citric acid increases and of dry matter and nicotine decreases. By splitting the stalks one day prior to harvesting the output of citric acid is effectively increased. J. S. Joffe.</p>																																																																																																																																																																								
ASB-SLA DETALLURGICAL LITERATURE CLASSIFICATION																																																																																																																																																																								
<table border="1"> <thead> <tr> <th colspan="13">SUBJECT INDEX</th> <th colspan="13">RELATION</th> <th colspan="13">RELATIVE QUALITY</th> </tr> <tr> <th colspan="13">SUBJECT INDEX</th> <th colspan="13">RELATION</th> <th colspan="13">RELATIVE QUALITY</th> </tr> </thead> <tbody> <tr> <td colspan="13">SUBJECT INDEX</td> <td colspan="13">RELATION</td> <td colspan="13">RELATIVE QUALITY</td> </tr> </tbody> </table>																																																				SUBJECT INDEX													RELATION													RELATIVE QUALITY													SUBJECT INDEX													RELATION													RELATIVE QUALITY													SUBJECT INDEX													RELATION													RELATIVE QUALITY												
SUBJECT INDEX													RELATION													RELATIVE QUALITY																																																																																																																																														
SUBJECT INDEX													RELATION													RELATIVE QUALITY																																																																																																																																														
SUBJECT INDEX													RELATION													RELATIVE QUALITY																																																																																																																																														

BUZNITSKIY, A.L.

Buznitskiy, A. L. "Biochemical Study of Sugar Beets Infected with Cercospora," in Principal Conclusions of the Scientific-Research Work of the All Union Scientific-Research Institute for the Sugar Industry for 1938, State Technological-Economical Publishing House of Food Industry, Moscow, 1940, pp. 164-165. 65.9 V96

So: SIRA SI - 9053, 15 Dec., 1953

KOZDOGRYZOV, V.S., kand. tekhn. nauk; TYSHKO, A.I.; RUZNITSKIY, L.A.

Effect of regulating the heat conditions of a holding furnace
on fuel consumption and the quality of ingot heating. Met. i
gornourud. prom. no.6:29-32 Nov '65.

(MIRA 18:12)

BUZNITSKIY, O.G. [Buznytskyi, O.H.], Geroy Sotsialisticheskogo Truda

Tillage with machinery owned by the collective farm. Mekh.sil'.bosp.
9 no.11:4-6 N '58. (MIRA 11:12)

1. Zaveduyushchiy kolkhozom im. Zhdanova, Starchenkovskogo rayona,
Kiyevskoy oblasti.

(Agricultural machinery)

BUZNITSKIY, O.G. [Buznyts'kyi, O.H.], Geroy Sotsialisticheskogo Truda,
deputat Verkhovnogo Soveta SSSR

Our method for mechanized harvesting of peas. Mekh. sil'. hosp.
13 no.7:9-10 J1 '62. (MIRA 17:3)

1. Predsedatel' kolkhoza im. Zhdanova, Starchenkovskogo rayona
Kiyevskoy oblasti.

BUZNITSKIY, V. [Buznyts'kyl, V.], inzh.

Contributions of research and planning organizations to rural
construction. Sil'. bud. 12 no.11:21 N '62. (MIRA 15:12)
(Ukraine--Construction industry)

TSEYTLIN, A.A.; FEL'DMAN, Z.D.; BUZNITSKIY, Ye.V.; DEKHTYAR, E.M.

Machine for making curvilinear reinforced concrete products. Suggested
by A.A.Tseytlin, Z.D.Fel'dman, E.V.Buznitskii, E.M.Dekhtiar. Rats.
i izobr. predl. v stroi. no.15:41-43 '60. (MIRA 13:9)

1. Po materialam Tekhnicheskogo upravleniya Ministerstva stroitel'stva
USSR.

(Concrete panels)

BUZNOV, S.

Effektivnost' peredachi korotkoprobezhnykh perevozok avtotransportu. [The Effectiveness
of transferring short distance freight to automotive transportation] (Zhel.-dor.
transport, 1948, no. 5, p. 78-82) DLC: HE7.Z5

SO: Soviet Transportation and Communication, A Bibliography, Library of Congress
Reference Department, Washington, 1952, Unclassified.

BUZO, N.A.

Teach and train cadres. Avtom. telemek. i aviaz' no. 8:36-37 Ag '57.
(MLRA 10:8)

1. Starshiy pomoshchnik Glavnogo revizora po bezopastnosti dvizheniya
Ministerstva putey soobshcheniya.
(Technical education)

KARETNIKOV, D.S.; BUZO, N.A., inzh., retsenzent; MARENKOVA, G.I.,
inzh., red.; USENKO, L.A., tekhn. red.

[Air-membrane pedal; layout, maintenance, and adjustment]
Vozdushno-membrannaia pedal' ustroistvo, obsluzhivanie i
regulirovka. Moskva, "Transport," 1964. 29 p.
(MIRA 17:3)

BUZO, N.A., inzh.

Incident at a switching point. Avtom., telem. i sviaz' 2 no.3:32-33
Mr '58. (MIRA 13:1)

(Railroads--Switches)

KUTUZOV, Roman Aleksandrovich; BUZO, N.A., inzh., retsenzent;
NIKOL'SKIY, V.A., inzh., retsenzent; MARENKOVA, G.I., inzh.,
red.; VASIL'YEVA, N.N., tekhn. red.

[Practice of the innovators at the Leningrad-Vitebsk Signaling
and Communications Department] Opyt ratsionalizatorov Leningrad-
Vitebskoi distantstil signalizatsii i sviazi. Moskva, Transzhel-
dorizdat, 1962. 49 p. (MIRA 15:7)
(Railroads--Communication systems)

BUZO, N.A.

Most advanced techniques should be used in servicing
centralized traffic control systems. Avtom., telem. i
svyaz' 7 no.10:4-6 0 '63. (MIRA 16:11)

1. Nachal'nik otдела signalizatsii, tsentralizatsii i
blokirovki Glavnogo upravleniya signalizatsii i svyazi
Ministerstva putey soobshcheniya.

BUZO, H.A.

How to improve the cold weather operation of CTC devices. Avtom.,
telem. i sviaz' 8 no.8:15-17 Ag '64. (MIRA 17:10)

1. Nachal'nik otдела signalizatsii, tsentralizatsii i elektrifikatsii
Glavnogo upravleniya signalizatsii i svyazi Ministerstva putey
soobshcheniya.

BUZO, N.A.

In a signaling district of "communist labor." Avtom., totem.
i sviaz' 9 no.11:21-22 N '65.

(MIRA 18:12)

1. Nachal'nik otdela signalizatsii, tsentralizatsii i
blokirovki Glavnogo upravleniya signalizatsii i svyazi
Ministerstva putey soobshcheniya.

BUZO, S., inzhener-gidrograf.

Calculating abacus. Mor.flot 7 no.6:43 Je '47.
(Abacus)

(MLRA 9:5)

1. BUZO, S., Eng.
2. USSR (600)
4. Sounding and Soundings
7. Determination of the type of ground on the bottom of navigable waters, with the aid of a sounding device. Mor. flot. 12, No. 10, 1952.
9. Monthly List of Russian Accessions, Library of Congress, January 1953, Unclassified.

BUZO, S. A.

15-57-4-5286D

Translation from: Referativnyy zhurnal, Geologiya, 1957, Nr 4,
p 171 (USSR)

AUTHOR: Buzo, S. A.

TITLE: The Acoustical Determination of Bottom Sediments (Ob
akusticheskom opredelenii gruntov dna). Author's
abstract of his dissertation for the degree of Candidate
of Technical Sciences, presented to Leningr. vyssh.
inzh.-mor. uch-shche (Leningrad Higher Marine Engi-
neering College), Leningrad, 1956.

ABSTRACT: The author proposes a theory for an acoustical method
which will permit one to determine the nature of
sediment by the form of the reflection from the sea
floor. He has studied the effect of absorption of sound
by the sound-conducting medium and the effect of the
conditions of sound distribution on the form of the
impulses employed. He has also examined the factors
upon which the reliability and the effectiveness of the
application of the method depend. The reliability of
determining the bottom sediments by this method is 93

Card 1/2

The Acoustical Determination of Bottom Sediments (Cont.)^{15-57-4-5286D}

to 94 percent. The work may be done by existing domestic apparatus, either from a fixed base or from a ship.

N. I. V.

ASSOCIATION: Leningr. vyssh. inzh.-mor. uch-shche (Leningrad Higher Marine Engineering College)

Card 2/2

BUZO, S.A. (Leningrad); SHAUFLER, D.Ya.; SURIN, N.M. (g.Nal'chik); FIRSOV, K.;
TEBEN'KOV, B.K.

Useful advice. Fiz. v shkole 18 no.4:64-65 J1-Ag '58. (MIRA 11:7)

1. Rudnik Zholymbet Akmolinskoy obl. Kaz.SSR, srednyaya shkola (for Shaufler). 2. St. laborant kafedry fiziki Permskogo gosudarstvennogo universiteta (for Teben'kov).
(Physics)

BUZOIANU, P., ing.; GALETEANU, I., ing.

Radioactive isotopes. St si Teh Buc 16 no. 5:9-11 May '64.

SINEL'NIKOV, D.K.; BUZOL, F.I.; STEPANOVA, G.I.

On the iodide method of purifying zirconium. Atom.energ. 4 no.
2:169-174 F '58.

(Zirconium--Metallurgy)

(MIRA 11:4)

BUZOLIC, O., Dr.; PAVESIC, Z., dr.

Rapid diagnosis of pregnancy by cervical smear. Lijec. vjes.
77 no.5-7:316-320 May-July 55.

1. Iz Ginekolosko-porodiljskog odjela Opce bolnice u Osijeku.
From the Dept. of Obstetrics and Gynecology, Gen. Hospital,
Osijek.

(PREGNANCY TESTS,

cervical smear, method. (Ser))

(VAGINAL SMEARS,

cervical, in diag. of pregn., Method.(Ser))

BUZOLIC, O., Dr.

Preoperative and postoperative care in gynecology. Med. glasn.
10 no.8:333-335 Aug 56.

1. Ginekolosko-porodiljski odjel opće bolnice u Osijeku (upravnik
dr. O. Buzolic).

(GYNECOLOGICAL DISEASES,

preop. & postop. care (Ser))

(PREOPERATIVE CARE, in various dis.

gynecol. dis. (Ser))

(POSTOPERATIVE CARE, in various dis.

same))

124-58-6-6657

Translation from: Referativnyy zhurnal, Mekhanika, 1957, Nr 6, p 50 (USSR)

AUTHORS: Altunin, S. T., Buzonov, I. A.

TITLE: Problems Concerning the Formation and Calculation of Stream Beds in Connection With a Water Intake (Voprosy formirovaniya i rascheta rusel pri vodozabore)

PERIODICAL: Tr. In-ta sooruzh. AN UzSSR, 1955, Nr 7, pp 5-105

ABSTRACT: This article contains the following sections: 1. Peculiarities of stream-bed formation in natural conditions and in hydraulic projects. 2. Calculation of natural stream beds; width of a stable branch; flow rate of a stable branch; form of instability. 3. Calculation of a regulated stream bed. 4. Movement of sediments and formation of stream beds in hydraulic projects; sediment-flow formulas, in terms of which a comparison is made of conditions in the natural upper reach with the conditions in the lower reach after withdrawal of water. 5. Calculation of the formation of regulated stream beds in connection with water intakes in the lower reaches of rivers. 6. Calculation of the reshaping of a stream bed in the headwater area of dams. 7. Calculation of the reshaping process in the tailwater area.

Card 1/3

124-58-6-6657

Problems Concerning the Formation and Calculation of Stream Beds (cont.)

8. Determination of the probable erosion depth, of the lowering of the water level, and of the length of the erosion area. 9. Calculation of the sedimentation in the tailwater area. 10. Examples of calculation of a stream bed in the vicinity of a water-intake installation; gathering and processing of fundamental data for the calculation; selection of calculated discharge rates; calculated water-intake coefficients; selection of calculated formation velocities; selection of stable stream-bed width coefficients; selection of the roughness coefficient and of the form of the formula. 11. Calculations of a natural stream bed; stream-bed calculations in terms of stream-bed-forming flow; stream-bed calculations in terms of flow averaged over several years during a period of intensive sediment movement; calculation of a stream bed at low water. 12. Determination of the carrying capabilities of a stream and of the sediment flow. 13. Calculations of a regulated stream bed in the head-and tail-water areas. 14. Calculation of stream-bed reshaping processes in the head-water area of a dam. 15. Calculations of the reshaping of the tailwater area of a dam. 16. Example of calculation of a regulated stream bed at a water-intake installation in a flat-lands section of a river. 17. The background knowledge for the given data includes the following: extensive experience in full-scale investigations carried out by the authors in Central Asia and experience in empirical laboratory investigations on erodable stream beds in the

Card 2/3

124-58-6-6657

Problems Concerning the Formation and Calculation of Stream Beds (cont.)

laboratories of the Academy of Sciences, UzSSR, and SANIIRI (Central Asian Scientific Research Institute for Irrigation). All this work represents an attempt at solving numerically the very complicated and varied stream-bed process which can be analyzed only with extreme difficulty.

1. Inland waterways--Properties
2. Inland waterways--Mathematical analysis

I. V. Yegiazarov

Card 3/3

BUZOV, Boris Aleksandrovich

MODESTOVA, Tat'yana Alekseyevna; FLEROVA, Lyudmila Nikolayevna; ~~BUZOV~~
Boris Aleksandrovich; KUKIN, G.M., prof., retsenzents; POZHIDAYEV, N.N.,
doksents, retsenzents; VARSHAVSKAYA, L.S., red.; MEDVEDEV, L.Ya.,
tekh.n.red.

[Material used in the clothing industry] Materialovedenie shveinogo
proizvodstva. Moskva, Gos.nauchno-tekh.n.izd-vo lit-ry po legkoi
promyshl., 1957. 438 p. (MIRA 10:12)
(Clothing industry--Equipment and supplies)

MODESTOVA, T.A.; BUZOV, B.A.

Changes occurring in the geometry of fabrics during stretching.
Izv.vys. ucheb. zav.; tekhn. tekst. prom. no.6:22-28 '63
(MIRA 17:8)

1 . Moskovskiy tekhnologicheskoy institut legkoy promyshlen-
nosti.

MODESTOVA, T.A., kand.tekhn.nauk, dotsent; BUZOV, B.A., inzh.

Methodology for determining some shaping property indices of
textile fabrics. Izv. vys. ucheb. zav.; tekhn. leg. prom.
no. 1:124-136 '60. (MIRA 14:5)

1. Moskovskiy tekhnologicheskii institut legkoy promyshlennosti.
Rekomendovana kafedroy tekhnologii shveytnogo proizvodstva.
(Textile fabrics—Testing)

BUZOV, B.A., inzh.

Strain gauge for measuring the stretch deformation of fabrics in
clothing. Izv.vys.ucheb.zav.; tekhn.leg.prom. no.5:95-101 '60.
(MIRA 13:11)

1. Moskovskiy tekhnologicheskoy institut legkoy promyshlennosti.
Rekomendovana kafedroy tekhnologii shveytnogo proizvodstva.
(Textile fabrics--Testing) (Strain gauges)