

KURBATOVA, M.D., kand.med.nauk; KRECHMER, B.B., kand.med.nauk

Radiographic determination of the size of the liver in children.
Pediatria 38 no.4:77-82 Apr '60. (MIRA 16:7)

1. Iz kafedry detskikh bolezney (zav.-deystvitel'nyy chlen AMN
SSSR prof. Yu.F.Dombrovskaya) I Moskovskogo ordena Lenina me-
ditsinskogo instituta imeni I.M.Sechenova.
(LIVER--RADIOGRAPHY)

L 31101-65 EWT(m)/EWP(w)/EWA(d)/T/EWP(t)/EWP(b) IJP(c) MJA/JD

ACCESSION NR: AP5003496

S/0148/65/000/001/0091/0094

AUTHOR: Krechmer, V.G.; Paisov, I.V.; Pizuzov, Yu. V.

26
21
B

TITLE: Some peculiarities of internal friction in complexly alloyed high strength steels

SOURCE: IVUZ. Chernaya metallurgiya, no. 1, 1965, 91-94

TOPIC TAGS: internal friction, steel internal friction, alloy steel, steel heat treatment, steel mechanical property/ 45KhGSNT steel, 45KhSNT steel

ABSTRACT: This paper is a study of internal friction in highly alloyed 45KhGSNT and 45KhSNT steels in relation to their mechanical properties after heat treatment. Ingots were melted in an induction furnace, and forged into 20 mm diameter rods at temperatures of 850-1100C. The rods were slowly cooled, tempered at 900C, and annealed at 680C. Impact and tensile strength samples were prepared, quenched in oil from 900C, annealed at 200-600C for two hours, and then cooled with the furnace. Internal friction was tested on 0.7 mm wire, drawn from 6 mm diameter rods. The wire was subjected to recrystallization annealing at 690C-to 200C (50-100C intervals) and held for 30 minutes. Internal friction and rigidity modules were determined in the RKF-MIS vacuum relaxator at a frequency of 0.75-0.85 cps. The curves of internal friction vs temperature were

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ACCESSION NR: AP5003499

first plotted up to 150C, then the sample was cooled at a rate of 3C/sec. and the internal friction was measured again. Then the operation was repeated, heating to 200C and so forth at 50C intervals up to 600C. Various friction peaks at temperatures from 200 to 500C were observed and plotted depending on the temperature peaks. These peaks are explained by structural changes in the steel. The two steel types are compared as to their relaxation, rigidity modulus and impact toughness. Steel 45KhSNT shows a more rapid weakening than steel 45KhGSNT with rising temperature -- due to its lower carbon and manganese content. The composition of these two alloys is;

| | C | Si | Mn | Cr | Ni | Ti | P | S |
|----------|------|------|------|------|------|-------|-------|-------|
| 45KhGSNT | 0.47 | 1.30 | 1.38 | 1.38 | 1.18 | 0.22 | 0.022 | 0.025 |
| 45KhSNT | 0.44 | 1.70 | 0.75 | 1.26 | 1.54 | 0.024 | 0.023 | 0.032 |

Orig. art. has: 2 figures and 1 table.

ASSOCIATION: Moskovskiy institut stali i splavov (Moscow steel and alloys institute)

SUBMITTED: 05Jun64

ENCL: 00

SUB CODE: MM

NO REF SOV: 004

OTHER: 000

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PROCESSES AND PROPERTIES INDEX

1ST AND 2ND GROUPS

3RD AND 4TH GROUPS

KRECHMER, S. I.

3

Photographic plates with thick emulsion for investigation in the distribution of radioactive elements in natural substances. V. I. Barnin and S. I. Krechmer. *Compt. rend. acad. sci. U. R. S. S. I.*, 261 (1965) (1965). — The method consists in exposure of the plate, with an emulsion of not less than 50 μ thickness, to the prepn. followed by microscopic examn. and count of α -particle tracks.
Gregg M. Evans

ASH-SLA METALLURGICAL LITERATURE CLASSIFICATION

1965-1970

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |
|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|-----|

KRECHMER, S.I.

Eksperimental'noe opredelenie teplovoi inertsii termoanemometra. (Akademiia Nauk, SSSR. Doklady, Novaia seriia, 1948, v. 61, no. 6, p. 997-1000, illus.)

Title tr.: Experimental determination of the thermal inertia of a hot-wire anemometer.

AS262.S3663 v.61

SO: Aeronautical Sciences and Aviation in the Soviet Union, Library of Congress, 1955

TREMPER, S. I.

"Experimental Investigation of Nitrogen Oxide Interactions in the Atmosphere."
Oct. 11, Geo. Mason Univ., Grad. Sch. of Sci.

Abstracts presented for sale at the American Chemical Society Meeting, 1971.
Soc. of Physico-Mathematical Sci.
Soc. of Chem. Eng., 1971.

OBUKHOV, A.M.; PINUS, N.Z.; KRECHMER, S.^I_H

Results of experimental investigations of microturbulence in the free
atmosphere. Trudy TSO no.6:174-183 '52. (MIRA 11:6)
(Atmospheric turbulence) (Aeronautics in meteorology)

USSR/Geophysics - Atmosphere Temperature Pulsations 1 May 52

"Investigating Micropulsations of the Temperature Field in the Atmosphere," S. I. Krechmer, Geophy Inst, Acad Sci USSR

"Dok Ak Nauk SSSR" Vol LXXXIV, No 1, pp 55-58

Describes microthermometer which he developed in 1948 - 1949 at the Lab of Atm Turbulence Geophys Inst, Acad Sci USSR, and which has a time const of 0.01 sec and sensitivity of 0.01°C, suitable for subject investigations. Subject pulsations are of interest in problems of atm optics and theory of propagation of radio waves (cf V. A. Krasil'nikov, 224T67

"Dok Ak Nauk SSSR" Vol LXV, No 3, 1949), requiring detailed study of temp pulsations in air (cf P. Sheppard, Weather, 6, No 2, 1951). Submitted by Acad M. A. Leontovich 11 Mar 52.

224T67

KRECHMER, S.I.

124-58-9-10052

Translation from: Referativnyy zhurnal, Mekhanika, 1958, Nr 9, p 87 (USSR)

AUTHOR: Krechmer, S. I.

TITLE: Methodology for the Measurement of the Microfluctuations of the Wind Velocity and the Temperature of the Atmosphere (Metodika izmereniya mikropul'satsiy skorosti vetra i temperatury v atmosfere)

PERIODICAL: Tr. Geofiz. in-ta AN SSSR, 1954, Nr 24, pp 43-111

ABSTRACT: Description of the instrumentation for the recording of fluctuations in the wind velocity and the temperature of the atmosphere which was developed by the Geofizicheskiy institut AN SSSR (Institute of Geophysics, Academy of Sciences, USSR) during 1947-1949. The recording accuracy is of the order of magnitude of 1 cm/sec for the wind velocity and 10^{-2} degrees C for the temperature; the time element is recorded to within 10^{-2} sec. (This degree of time inaccuracy leads to a leveling of any variations in the velocity and temperature distribution on a scale of the order of 5 cm for a wind velocity of 3 m/sec.) The instrumentation is based on the principle of the hot-wire anemometer; the probes employ thin platinum wires (20μ diam).

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124 -58-9-10052

Methodology for the Measurement of the Microfluctuations (cont.)

During wind-velocity measurement the filament is heated to 200-300°C by the passing of a current (of the order of 0.2-0.25 amp). Temperature changes (and, consequently, resistance changes) occurring in the filament are governed by its heat rejection to the air, which depends on the wind-velocity component normal to the filament and is virtually independent of moderate air-temperature variations (of the order of magnitude of 1 degree C). Therefore, a measurement of the resistance of the filament yields a determination of the wind-velocity component normal to it; an inconvenience therein arises through the non-linear character of the relationship between the resistance and the wind velocity. The resistance measurement is performed by means of a Wheatstone bridge, so that (with the aid of a galvanometer and a loop oscillograph) the current intensity in the diagonal of the bridge can be measured directly. The hot-wire anemometer can be planned for the measurement of the horizontal wind-velocity component (with a probe having a vertically positioned filament) or of the difference between the horizontal components at two points of the flow (two probes are plugged into the arms of a Kelvin double bridge, so that both the sum and difference of their resistances can be recorded simultaneously). The measurement of the vertical wind-velocity component is rendered possible by an "angular adapter", which consists of two filaments positioned in a vertical plane at angles of +45° and -45° relative to the direction of the

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124-58-9-10052

Methodology for the Measurement of the Microfluctuations (cont.)

mean wind. The difference between the resistances of these two filaments is approximately proportional to the vertical wind-velocity component (wherein the ratio factor is a function of the resultant wind velocity. In the micro-thermometer element the current passing through its filament is of low intensity (of the order of 1 ma), so that the overheating of the filament relative to the surrounding air does not exceed 0.01°C . Therefore, the temperature (and, hence, the resistance) of the filament depends upon the air-temperature fluctuations and is virtually independent of the wind velocity. The resistance is also measured by means of a Wheatstone bridge, and it is found that the current intensity in the diagonal of the bridge is proportional to the air-temperature fluctuations. The recording of the current in the diagonal requires amplification by a factor of 10^3 , which is accomplished on a carrier frequency (4 kc) with the use of a phase-sensitive detector, so that an output current can be obtained which changes sign with a change in the sign of a temperature fluctuation. The theory of the instrumentation is set forth, its design is described, the results of an experimental investigation of the instrument characteristics are presented, and the instrument-calibration and data-analysis procedures are described. Bibliography: 26 references.

1. Wind--Velocity 2. Atmosphere--Temperature 3. Temperature--Recording devices
A. S. Monin

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KRECHMER, S. I.

60-33-2/3

AUTHOR: Krechmer, S.I.

TITLE: Regarding Variability of Wind Direction (K voprosu ob izmenchivosti napravleniya vetra)

PERIODICAL: Trudy Geofizicheskogo instituta, Nr 33 (160), pp.48-59 (USSR) ^{Akademi nauk SSSR}

ABSTRACT: The article discusses the results of an investigation conducted by the Geophysical Institute of the Academy of Sciences of the USSR in 1954 on the variability of wind direction. The author analyses the relationship between the structural functions in the direction and the velocity of the wind for different relative positions of the base and the vector of velocity. A qualitative evaluation of changes in the direction of the wind and a statistical presentation of registered material are given. **Spatial and reduced "space-time"** structural functions of the field of directions are developed which are in agreement with existing data on the structure in the field of velocities. There are 10 figures, and 7 references of which 5 are Russian, 1 English and 1 American.

AVAILABLE: Library of Congress
Card 1/1

SOV/124-57-9-10607

Translation from: Referativnyy zhurnal. Mekhanika, 1957, Nr 9, p 107 (USSR)

AUTHOR: Krechmer, S. I.

TITLE: Experimental Determination of the Characteristics of Temperature Fluctuations in the Atmosphere (Eksperimental'noye opredeleniye kharakteristik temperaturnykh pul'satsiy v atmosfere)

PERIODICAL: Tr. Tsent. aerolog. observ., 1956, Nr 16, pp 39-47

ABSTRACT: A continuation of the experimental investigations by the author on the microstructure of the temperature field in the atmosphere (Dokl. AN SSSR, 1949, Vol 63, Nr 3). The same instrumentation and methodology is used as in the preceding investigations. The measurements were performed during the summer of 1953 at the field station of the Geophysics Institute, Academy of Sciences, USSR. Some data from the earlier investigations are also used. The distribution curves of the temperature microfluctuations at fixed reference points exhibit a distinct asymmetry, with the maxima displaced toward the side of the positive fluctuations. This indicates that negative temperature fluctuations are encountered less frequently, but that they have a greater amplitude than the positive ones; this can be attributed to

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SOV/124-57-9-10607

Experimental Determination of the Characteristics of Temperature (cont.)

occasional outbreaks of cold stable air masses. The distribution curves of the synchronous temperature differences between two points located at a base length l are of close to normal shape. As the base length is increased ($l = 2$ and 32 cm were tested) the frequency distribution curves are substantially "washed out", i. e., the frequencies of large temperature differences increase. The data of six recordings, with mean values computed up to 20 seconds, are used to investigate the mean-square temperature difference at two points, that is, the root of the structural temperature function

$$H(l) = [T(H') - T(M)]^2$$

For l ranging from 0.5 to 50 cm the results are closely described by the formula

$$\sqrt{H(l)} = 8.2 \cdot 10^{-3} l^{0.32}$$

where the temperature is given in degree C and l in cm. The exponent 0.32 is extremely close to the theoretical value of $1/3$ obtained by A. M. Obukhov (Izv. AN SSSR, ser. geogr. i geofiz., 1949, Vol 13, Nr 1) and by A. M. Yaglom (Dokl. SSSR, 1949, Vol 69). The coefficient of $8.2 \times 10^{-3} \text{ } ^\circ\text{C} \cdot \text{cm}^{-1/3}$ is several times Card 2/3

SOV/124-57-9-10607

Experimental Determination of the Characteristics of Temperature (cont.)

smaller than the results of theoretical estimates and the values previously obtained for it by the author. This may perhaps be attributed to the insufficient number of recordings and the insufficient averaging time employed. However, the manual handling of the data for the numerical computation of the structural function, when the averaging is done for a period of the order of a few minutes, is extremely time consuming. Therefore, automation of this data handling is desirable, in order that the instrument be capable of determining directly either the structural functions or the correlation moments.

L. S. Gandin

Card 3/3

124-58-6-6855

Translation from: Referativnyy zhurnal, Mekhanika, 1958, Nr 6, p 85 (USSR;

AUTHOR: Krechmer, S.I.

TITLE: On Directional Variability of the Wind (K voprosu ob izmenchivosti napravleniya vetra)

PERIODICAL: Tr. Geofiz. in-ta AN SSSR, 1956, Nr 33 (160), pp 48-59

ABSTRACT: It is shown that if the pulsations of the wind velocity vector are small in comparison with the mean wind velocity U then the longitudinal structural function of the wind direction is proportional to the transverse structural function of the wind speed; and the transverse structural function of the wind direction is proportional to the longitudinal structural function of the wind speed. In both cases the proportionality coefficient is equal to U^{-2} . The variability of the wind direction is examined experimentally by means of a weathervane equipped with potentiometric gages and an oscillograph. Four of these weathervanes were installed in a straight line in such a way as to enable the author to determine the structural functions for six distances ranging from 50 to 375 meters. Visual analysis of the oscillographic recordings made it possible to divide the results obtained into four

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124-58-6-6855

On Directional Variability of the Wind

groups, depending upon the predominant oscillatory frequencies, namely:
1) from 840 to 60 fluctuations in wind direction per hour; 2) from 60 to 12;
3) from 12 to 2; 4) less than 2 hourly fluctuations in wind direction. The inertia of the weathervane had an adverse effect on the recordings of the high-frequency fluctuations. The classification of results adopted is similar to that proposed by Singer and Smith (Singer, Irving A., Smith, Maynard E., J. Meteorol. 1953, Vol 10, Nr 2, p 121 - RzhMekh, 1954, Nr 3, abstract 2626). It is shown that with an increase in the mean wind velocity the frequency of the long-period pulsations (group III) diminishes; the frequency of the short period pulsations (group I) increases, whereas the frequency of pulsations of the intermediate group II does not exhibit any regular variations. The structural function of the wind direction was investigated in two ways: directly - by simultaneous registration of readings at several different points, and indirectly - by registrations obtained at different times at the same points (by way of a structural function based on time), founded on the hypothesis of the translation of the pulsations by the mean flow. For small velocity values the structural function becomes a constant. For velocities of the order of 7 mps, the structural function $A(l)$ is determined by the relationship $A(l) = B l^\alpha$, where the exponent α varies between 0.19 and 0.23 in conformity with the theoretical deductions of A.M. Yaglom (Tr. Geofiz. in-ta AN SSSR, 1954, Card 2/3

124-58-6-6855

On Directional Variability of the Wind

Nr 24) according to which $\alpha = 0.21$. The histograms of the wind direction and wind-direction fluctuations for different time intervals and different mean velocities are also analyzed.

L. S. Gandin

1. Wind--Direction
2. Wind--Velocity
3. Wind direction indicators
4. Wind--Mathematical analysis

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KRECHMER, S.I.

Field gradientmeter for measuring air-temperature gradients, Trudy
TSAO no. 22:96-99 '57. (MIRA 11:4)
(Atmospheric temperature) (Meteorological instruments)

АВТОМАТ, 5 /.

В. В. Бузуев,
С. И. Брылюв
Техника автоматического управления

9 июня
(с 18 до 22 часов)

Н. Д. Савинин,
С. Г. Каргуцкий
Электронные измерительные приборы

В. С. Митинский
О возможности прямой передачи сигнала на
длинном расстоянии при стереоразличии и
адаптивной обработке сигналов

Д. И. Екимович
Стереоразличия в радиотехнике связи

10 июня
(с 10 до 16 часов)

В. А. Марченко,
М. А. Шенков
Контроль и управление тропосферными волнами
при радиосвязи

А. С. Голубин
Методы измерения амплитуды и фазы сигнала
в радиосвязи тропосферными волнами

В. М. Яков
Полупроводниковые стабилизированные источники
МГФЧ для радиотехнических устройств

В. А. Марченко
Новый прибор для автоматического измерения на
частотных характеристиках и пропускной способности

10 июня
(с 18 до 22 часов)

Н. Д. Носовичев
Защитные устройства системы на полупроводниковых
элементах

М. И. Подкоп
Анализ помеховой обстановки радиосвязи при
использовании на приемной стороне системы с
автоматическим регулированием

11 июня
(с 10 до 16 часов)

ВНЕШНЕЕ ЗАСЕДАНИЕ НА МОСКОВСКИХ
М. И. Подкоп Носовичев

Исход системы стереоразличия стереоразличия
на длинных расстояниях и радиосвязи тропосферными
волнами. Издание на вид (ссылка)

report submitted for the Centennial Meeting of the Scientific Technological Society of
Radio Engineering and Electrical Communications in A. S. Popov (VSEIET), Moscow,
6-12 June, 1959

30527

S/194/61/000/008/091/092
D201/D304

6.9210

AUTHORS: Furduev, V.V. and Krechmer, S.I.

TITLE: The present auto-correlation of a speech signal

PERIODICAL: Referativnyy zhurnal. Avtomatika i radioelektronika,
no. 8, 1961, 58, abstract 8 K495 (V sb. 100 let so
dnya rozhd. A.S. Popova, M., AN SSSR, 1960, 228-234)

TEXT: The statistical properties of speech are quantita-
tively determined by the first distribution and the integral law of
distribution of instantaneous values of the autocorrelation func-
tion for different delay times. The experimental evaluation of the
RMS values of this function has resulted in determining the coher-
ence coefficient as a function of the timeshift of the signal and of
its delayed repetitions. The coherence interval of the speech sig-
nal is about 70-80 microsec. Two tape recorders were used in the
measuring arrangement, one of which was used as a controlled 0-0.56
sec. delay line. The direct and delayed signals were applied to a

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D201/D304

The present auto-correlation...

correlator with an integrator having a time constant of 30 microsec.
The indications were recorded on a loop oscilloscope. The statis-
tical processing of correlograms was carried out manually. [Ab-
stracter's note: Complete translation]

X

Card 2/2

KRECHMER, S., kand.fiz.-mat.nauk; DOL'NIK, A.

Artificial reverberation and reverberators. Radio no.6:57-59 Je
'60. (MIRA 13:7)
(Vibrators) (Sound--Equipment and supplies)

YANKOVSKAYA, A.S. [Iankovs'ka, H.S.]; KNYAZEVA, K.N. [Kniazieva, K.N.];
KRECHMER, S.I.

Methodology for the simultaneous recording of electromyograms,
mechanograms and the amp'itude of motion in the joints. Fiziol.
zhur. [Ukr.] 8 no.4:556-558 J1-Ag '62. (MIRA 18:4)

1. Laboratoriya biologii Instituta gerontologii AMN SSSR i
Ukrainskiy tsentral'nyy nauchno-issledovatel'skiy institut
ortopedii i travmatologii, Kiyev.

KRECHMER, V. [Krecmer, V.]

Works of Czech scientist Emanuel Purkyne. Meteor.i.gidrol. no.9:
53 S '63. (MIRA 16:10)

1. Nauchno-issledovatel'skiy institut lesnogo khozyaystva,
Zbraslav-Strnady, Chekhoslovakiya.

L 51304-65 ENT(m)/ENP(z)/ENA(c)/E/ERP(b)/ENA(d)/ENP(w)/ERP(t) MJW/JD

ACCESSION NR: AP5013328

UR/0148/65/000/005/0148/0151
669.15:669.26'74'782:620.178.16

AUTHOR: Paisov, I. V.; Krechmer, V. G.

26
27
B
10

TITLE: Investigation of the wear resistance of complex-alloy, high-strength steels

SOURCE: IVUZ. Chernaya metallurgiya, no. 5, 1965, 148-151

TOPIC TAGS: high strength steel, alloy high strength steel, steel wear resistance/47KhGSNT steel, 44KhSNT steel, 60KhGST steel, 50KhGSMT steel

ABSTRACT: The wear resistance of 47KhGSNT, 44KhSNT, 60KhGST, and 50KhGSMT high-strength alloy steels has been studied. Specimens were quenched from 880, 890, 830, and 860C, respectively, tempered at 200C for 2 hr, and cooled in air. The microstructure of tempered steel consisted of martensite and residual austenite. It was found that 47KhGSNT and 44KhSNT steels have a low hardness (511 HV) because of an excessive amount of residual austenite (up to 6-7%); the 60KhGST steel has a high hardness (710 HV) due to the high content of carbon and the absence of nickel. Wear resistance tests showed that 50KhGSMT and 60KhGST steels are the most wear resistant due to their high carbon content, the absence of nickel, and, in 50KhGSMT steel, the presence of molybdenum. The 47KhGSNT and 44KhSNT steels have the same hardness, but the wear resistance in 47KhGSNT steel is higher because of
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L 51304-65

ACCESSION NR: AP501332B

its high content of carbon, manganese, and titanium. During wear tests, the friction raises the temperature to 300--320C and increases the steel hardness by inducing austenite decomposition, strain hardening, and martensitic transformation. The friction slightly lowers the hardness of 60KH2SMT steel due to the change in composition of its matrix, but its hardness remains as high as that of 50KH2SMT steel (660--680 HV). However, the wear resistance of the latter is greater. The tests show that steel hardness cannot serve as an indication of wear resistance. Orig. art. has: 2 figures. [ND]

ASSOCIATION: Moskovskiy institut stali i splavov (Moscow Institute of Steel and Alloys)

SUBMITTED: 22Jul64

ENCL: 00

SUB CODE: MM

NO REF SOV: 004

OTHER: 001

ATD PRESS: 4016

Card

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KRECHNER, V.G.; PAISOV, I.V.; FIGUZOV, Yu.V.

Certain characteristics of internal friction in complex-alloy
high-resistance steel. Izv. vys. ucheb. zav.; Chern. met. 8
no.1:91-94 '65 (MIRA 18s1)

1. Moskovskiy institut stali i splavov.

L 04681-67 EWT(m)/EWP(w)/T/EWF(t)/ETI IJP(s) JD/JG

ACC NR: AR6020945

SOURCE CODE: UR/0137/66/000/002/I059/I059

AUTHOR: Paisov, I. V.; Krechmer, V. G.

TITLE: Mechanical properties of new high strength steels

SOURCE: Ref zh. Metallurg, Abs. 2I393

REF SOURCE: Sb. statey aspirantov i soiskateley. M-vo vyssh. i sredn. spets. obrazovaniya KazSSR. Metallurgiya i obogashch., vyp. 1, 1965, 181-187

TOPIC TAGS: high strength steel, metal grain structure / KhGSNTF steel, 45KhGSTF steel, 45KhGNTF1 steel, 40KhNMA steel, 30Kh2GN2 steel

TRANSLATION: The carbon content of the steels is 0.35-0.45%. Fine grain structure of the steel is attained through deoxidation and ferrotitanium. For grain refinement, 0.12-0.32% V was added. The composition of the experimental steels are as follows:
37KhGSNTF—0.37% C, 0.76% Si, 1.38% Mn, 1.34% Cr, 1.04% Ni, 0.15% Ti, and 0.27% V;
45KhGSTF—0.46% C, 0.86% Si, 1.59% Mn, 1.40% Cr, 1.10% Ni, 1.10% Ti, and 0.12% V;
35KhGSTF—0.34% C, 0.79% Si, 1.45% Mn, 1.0% Cr, 0.15% Ni, 0.35% Ti, and 0.32% V. Samples were quenched from 880°C and tempered at 200-600°C (air cooling). After tempering at 200°C 45KhGNTF1 steel had σ_b 180 kg/mm², a_k 7.7 kgm/cm², δ 10%, and ψ 40%. After tempering in the 500-600°C range we found a decrease of a_k and brittle fractures

UDC: 669.018.298.3

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L 04681-67

ACC NR: AR6020945

in the specimens. Upon simultaneous decrease in V and Ti contents, the increase in C content from 0.37 to 0.46% lowered a_k in 45KhGSNTF1 steel. For a quality high strength steel (σ_b 170-185 kg/mm², a_k 6-7.5 kgm/cm², δ 10-11%, and ψ 40%) 45KhGSNTF was recommended after quenching from 880°C and tempering at 200-250°C. 45KhGSNTF steel could replace 40KhNMA and 30Kh2GN2 steels. For the replacing of 30Kh2GN2 steel it is necessary to decrease the C content in 34KhGSNTF steel to 0.35%. V. Olenicheva.

SUB CODE: 11

Card 2/2

fv

KRECHMER, V. V.

USSR/Engineering
Model Testing
Deformation
Apr 49

"Some Problems in the Theory of Mechanical Similarity (Dimensional Analysis)," V. V. Krechmer, Sci Res Inst, Min for Constr of Mach-Bldg Enterprises, 4 pp

"Dok Ak Nauk SSSR" Vol LXV, No 4

Discusses deformation equations for a body and a model (homogeneous and isotropical elastic bodies geometrically similar and made of the same material) when acted upon by surface forces and volume

41/49T31

USSR/Engineering (Contd) Apr 49
forces. Submitted by Acad L. S. Leybenzon,
9 Feb 49.

PA 41/49T31

41/49T31

KRECHMER V. V.

TA 172T23

USSR/Engineering - Soil Mechanics
Modeling

21 Oct 49

"Modeling by Means of a Centrifugal Apparatus in the Presence of Filtration Processes of a Definite Class," V. V. Krechmer, Sci Res Inst, Min for Constr of Mach-Bldg Enterprises.

"Dok Ak Nauk SSSR" Vol LXVIII, No 6, pp 997-999

Discusses modeling used to study problems which arise in design of equipment whose stability and strength are chiefly dependent upon shifts of the bottom and water in it. Submitted by Acad A. I. Nekrasov 26 Aug 49.

172T23

KRECHMER, V. V.

124-11-13209

Translation from: Referativnyy Zhurnal, Mekhanika, 1957, Nr. 11, p 135 (USSR)

AUTHOR: Krechmer, V. V.

TITLE: Calculation Method for Plank Walls as Elastic Structural Elements with Due Consideration to the Compressibility of the Ground in the Restraining Encasement Area. (Metod rascheta shpuntovykh stenok kak uprugikh konstruktsiy s uchetom szhimayemosti grunta v oblasti zadelki)

PERIODICAL: Tr. N.-i. in-ta osnovaniy i fundamentov, 1956, Nr 30, pp 74-110

ABSTRACT: Calculation of the strength and deformation of a grooved wall loaded with earth fill, with or without a tie-down at the anchorage support. The upper portion is considered loaded by the active pressure of the fill. The lower portion is calculated as a bar which is elastically fastened to an elastic semi-plane. The contact problem is solved for an elastic bar and semi-plane with a load and moment representing the action which the fill exerts on the bar. No account is taken of the discontinuity in the semi-plane created by the insertion of the bar. The friction between the soil and the plank is disregarded. The stresses in the semi-plane are determined by means of Melan's

Card 1/3

124-11-13209

Calculation Method for Plank Walls as Elastic Structural Elements with Due Consideration to the Compressibility of the Ground in the Restraining Encasement Area. (Cont.)

formula as modified by the reviewer (Gorbunov-Posadov, M. I., Shekhter, O. Ya., and Kofman, V. A., Tr. N.-i. in-ta osnovaniy i fundamentov, 1954, No. 24, pp 39-80; Referativnyy Zhurnal, Mekhanika, 1956, No. 11, 7680). The displacements are determined according to formulas adduced in the same work. The contact conditions, namely, the equality of the respective horizontal displacements, are imposed at three points only. This enabled the Author to relieve the computer from the need for the simultaneous solution of a system of equations.

The plastic deformations in the soil close to the upper portion of the elastic anchorage manifold are also disregarded. However, it is recommended that the depth to which the planks are driven into the ground be established from the requirement that the portion where the reaction pressure exceeds the passive pressure of the soil (with due consideration to the coupling) extend over no more than one-fourth of the length of the elastic clamping portion.

It is proposed that the lower end of the plank, which in the basic calculation is assumed to be free, is neither displaced nor rotated because of the presence of the stress-resistant semi-plane. There-

Card 2/3

124-11-13209

Calculation Method for Plank Walls as Elastic Structural Elements with Due Consideration to the Compressibility of the Ground in the Restraining Encasement Area. (Cont.)

fore, it is proposed that the reaction of the anchoring tie-down be determined as the reaction of a rigid support of a beam which is clamped at its lower end and loaded with an active pressure in its upper part and a reaction pressure in its lower part.

(M. I. Gorbunov-Posadov)

Card 3/3

KRECHOWIECKI, ADAM.

Zarys anatomii człowieka; kompendium dla studentów i lekarzy. (Wyd 1.)
Poland
Warszawa, Państwowy Zakład Wydawn. Lekarskich, 1958. xi, 614 p.

Monthly List of East European Accessions Index (EEAI), LC, Vol. 6, No. 6, June 1959
Uncl.

KRECHOWIECKI, Adam

Notes on the variability of the vena cephalica antebrachii in man.
Roczn. pom. akad. med. Swierczewski. 8:127-140 '62.

1. Z Zakladu Anatomii Prawidlowej i Topograficznej Pomorskiej Akademii
Medycznej Kierownik: prof. dr Adam Krachowiecki.
(FOREARM) (AXILLARY VEIN)

KRZYSZTOF ILECKI

15 years of existence and activities of the Remembrance Society
of Medicine. *Biern. Kom. wyd. P. I. G. Szczepanski 19 10 95 194.*

KRECHUN

ROMANIA / Acoustics, Ultrasonics.

J-4

Abs Jour : Ref Zhur - Fizika No 3, 1957, No 7492

Author : Krechun

Title : Ultrasonics in Medicine

Orig Pub : Viata noii, 1956, 3, No 6, 31-40

Abstract : No abstract.

Card : 1/1

- 84 -

KRECHUH, E. [Gracian, E.] prof. (Bucharest)

Pathomorphological synergism as a histophysiological problem [with
summary in English]. Arkh.pat. 20 no.2:3-9 '58. (MIRA 11:4)

(DISEASE

synergism of organ funct. & tissue structure in dis.
processes (Rus))

(PATHOLOGY

name)

ERECIUN, Emil' [Creclun, Emil], prof. (Bukharest)

Local and systemic factors in regeneration during disease.
Ark. pat. 27 no.6:47-53 '65. (MIRA 19:1)

1. Chlen-korrespondent AN Rumynskoy Narodnoy Respubliki.
Submitted January 8, 1964.

EXCERPTA MEDICA Sec 15 Vol 12/4 Chest Diseases Apr 59

889. IMMEDIATE AND LATE RESULTS OF 2000 OPERATIONS FOR SEPARATION OF PLEURAL ADHESIONS AFTER JACOBÆUS (Russian text) - Krechun I., Krechun A. and Milosh G. - RUM.MED. OBOZ. 1957, 1 (56)

In 1,195 out of 2,000 cases of Jacobæus operation for separation of pleural adhesions a complete collapse was achieved. The immediate clinical results were as follows: in 73% of cases an improvement was noted, in 21% the condition remained unchanged, and in 6% a worsening was observed. Late results were as follows: a marked improvement was observed in 41.2%, an improvement in 35.2%, and a worsening of the condition in 14.3% of the patients. In 9.3% of cases there was a fatal outcome.

(S)

1ST AND 2ND PAPERS PROCESSES AND PROPERTIES -DEA 140 AND 1TH (LEDER)

21 KRECHUN, N. B. **2**

Influence of sorbed vapor on the static hysteresis of wetting. M. V. Chapuk and N. B. Krechun. *Colloid J.* (U. S. S. R.) 5, 703-6(1939).-- The contact angles between minerals, water and mineral oil are for air-dry quartz 52°, calcite 60°, limonite 135°, and hornblende 45°, and for the same minerals after drying *in vacuo* 135°, 100°, 180° and 92°, resp. Obviously the low angles observed before drying are caused by adsorbed H₂O vapor. The values of the angles between graphite, water and mineral oil strongly depend on whether the dried graphite was first immersed in H₂O or in the oil. J. J. Bikerman

COMMON ELEMENTS COMMON ELEMENTS

MATERIALS INDEX METALLURGICAL LITERATURE CLASSIFICATION

1ST AND 2ND PAPERS PROCESSES AND PROPERTIES -DEA 140 AND 1TH (LEDER)

1ST AND 2ND PAPERS PROCESSES AND PROPERTIES -DEA 140 AND 1TH (LEDER)

BRITISH SOIL, M. S., BRITISH SOIL.

Soil Science

Significance of the stability of .25-.50 μ structural fractions in analyzing soil properties. Trudy Inzh. sel'khoz. inst. No. 2, 1951.

Monthly List of Russian Acquisitions, Library of Congress
June 1951. 2 Cl.

BRONIN, K. B.

Journal of the Science of
Food and Agriculture
April 1954
Agriculture and Horticulture

(2)
Fractional method of aggregate analysis of soil. N. E. Bekasovich,
M. B. Krachun, and V. N. Sotnikova (*Pochvovedenie*, 1953, No. 5,
46-54; *Soils & Fert.*, 1953, 10, 355).—Air-dry soil is fractionated
by dry-sieving and the aggregate stability by wet-sieving after
rapid moistening. The stability of the fraction 0.25—0.5 mm. and
the effect of fractional size on aggregate stability are better indica-
tions of the agronomic characteristics of the soil than is the aggregate
stability determined after capillary moistening or on unfractionated
soil. A. G. POLLARD

KRECHUN, Yu. B., Cand Agr Sci -- (diss) "Agrotechnical bases for a system of machines in the raising of corn with minimal expenditures of labor under the conditions of the steppes in the Ukrainian SSR." Khar'kov, 1960. 17 pp; (Ministry of Agriculture Ukrainian SSR, Khar'kov Order of Labor Red Banner Agricultural Inst im V. V. Dokuchayev); 200 copies; free; (KL, 27-60, 156)

KRECHUN, Yuriy Borisovich; KANIVETS, Ivan Danilovich, nauchnyy sotrudnik;
ZADONTSEV, A I., zasl. doyatel' nauki USSR, akademik, red.;
LIVENSKAYA, O.I. [Livenskaya, O.I.], red.; GLUSHKO, G I
[Hlushko, H.I.], tekhn. red.

[Over-all mechanization of growing and harvesting] Kompleksno-
mekhanizovany vyroshchivannya ta zbirannya kukurudzy. Dnipro-
petrovs'k, Dnipropetrovskhe inzhkove vyd-vo, 1961. 49 p.

(MIRA 15:7)

1. Zavednyushchiy otdelom mekhanizatsii Vsesoyuznogo nauchno-
issledovatel'skogo instituta kukuruzy (for Krechun). 2. Vseso-
yuznyy nauchno-issledovatel'skiy institut kukuruzy (for
Kanivets'). 3. Direktor Vsesoyuznogo nauchno-issledovatel'skogo
instituta kukuruzy i Vsesoyuznaya akademiya sel'skokhozyaystven-
nykh nauk im. V.I.Lenina (for Zadontsev).
(Ukraine--Corn (Maize))

KRECISZ, Jerzy (Warszawa)

Dynamics and structural model of a gyroscope with three degrees of freedom. Archiw bud masz 9 no.2:295-314, '62.

L 35411-65 EEC-2/ENT(d)/FSS-2/EEC(k)2/ENG(v)/EED-2/EWA(c) Pn-4/Po-4/Pe-5/Pg-4/
ACCESSION NR: AP5000961 Pq-4/Pk-4/Pl-4 BC P/0032/64/011/003/0497/0513

AUTHOR: Krecisz, J. (Warsaw)

59
58
B

TITLE: Dynamics of a stabilized gyrovertical

SOURCE: Archiwum budowy maszyn, v. 11, no. 3, 1964, 497-513

TOPIC TAGS: gyrovertical, vertical gyroscope, gyroscope, gimbal, gyroscope mounting, gyroscope stability, stabilized vertical gyroscope, vertical reference system, inclination angle, tilt angle

ABSTRACT: The stabilized gyrovertical is the measuring element of a recorder designed for continuous measurement of a ship's motion at sea. It is a controlled multiparameter system with four control circuits. Fig. 1 of the Enclosure shows inner frame 3 suspended in frame 4 and forming a reference system. Frame 4 is suspended in the instrument case, the combination forming a Cardan joint. The inner frame contains gyroscopes 1 and 2 with two degrees of freedom. The vectors of angular momentum of the gyroscopes are mutually perpendicular, H_1 being perpendicular to the CC axis and coinciding with the BB axis, and H_2 being perpendicular to the BB axis and parallel to the CC axis. Under the effect of moments of external forces the gyroscopes precess either with respect to the A_1A_1 axis or the A_2A_2

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L 35411-65

ACCESSION NR: AP5000961

axis on which the NS1 and NS2 signal transmitters are situated. The signals are transmitted to amplifiers W1 and W2 and, following their amplification, proceed to servo motors SM1 and SM2, which generate stabilizing moments with respect to the axes. The vertical position of frame 3 with respect to both axes of the gimbal is attained by placing weights Q1 and Q2 on the gyroscopes. The angle of tilt ψ_m , the angle of inclination ϕ_m , and the vertical acceleration \ddot{z} are measured against the vertical reference system. The angles are measured by two potentiometers and the acceleration by an accelerometer located in the inner frame. A detailed analysis of the work of one stabilization circuit and one correction circuit has been carried out. A model of the stabilized gyrovertical has been worked out on the basis of the theory of automatic control and its stability with respect to the static gain K and the moment of momentum H of the gyroscope has been determined. Orig. art. has: 40 formulas and 16 figures.

ASSOCIATION: Katedra Osprzetu Lotniczego Politechniki Warszawskiej (Department of Aeronautical Accessories, Warsaw Polytechnic Institute)

SUBMITTED: 00Feb64

ENCL: 01

SUB CODE: NI

NO REF SOV: 001

OTHER: 004

Card 2/3

L 35411-65

ACCESSION NR: AP5000961

ENCLOSURE: 01

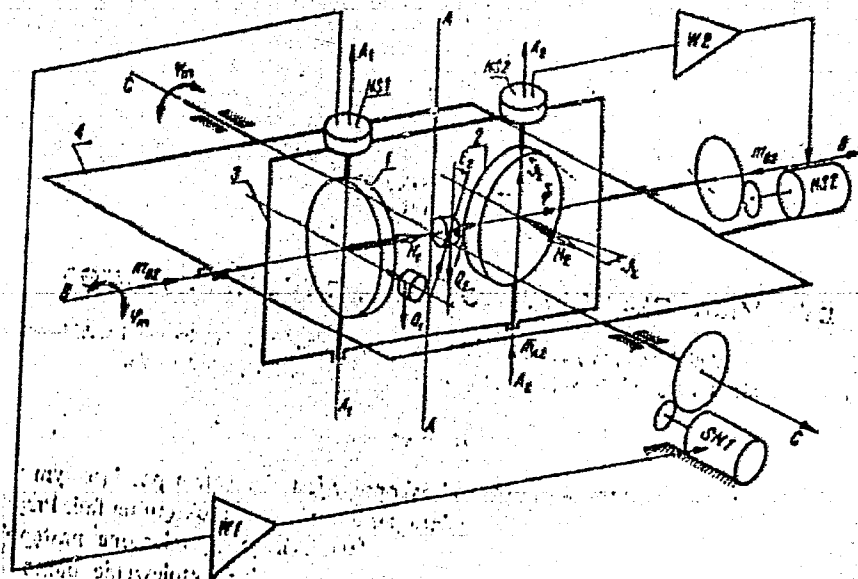


Fig. 1. Schematic of stabilized gyrovertical

Card 3/3

L 41329-65 EEO-2/EWT(d)/EEC-L4 Pn-L4/Pa-L4/Pq-L4/Pg-L4/Pk-L4/PL-L4 BC

ACCESSION NR: AP4642119

P/0034/64/000/006/0234/0237

40
39
B

AUTHOR: Glebicki, Kazimierz (Professor, Master engineer); Kracisz, Jerry (Master engineer)

TITLE: A measuring system for recording the parameters of the motion of ships

SOURCE: Pomiary, automatyka, kontrola, no. 6, 1964, 234-237

TOPIC TAGS: ship motion, marine navigation, gyroscope system, recording gyroscope, pitch angle, roll angle

ABSTRACT: The paper describes a system for recording the following parameters of the motion of ships: the pitch angle ψ_m , the roll angle ϕ_m , and the vertical acceleration of the ship's center of gravity a_z . Fig. 1 of the Enclosure shows the x, y, z axes of the gyroscope reference system associated with the earth's reference system; the x_p, y_p, z_p axes constitute the reference system of the ship's hull. Fig. 2 of the Enclosure shows the block diagram of the three-channel measuring and recording system. Fig. 3 of the Enclosure shows the schematic diagram of the gyroscope system employed. The measured quantities are recorded continuously on a common three-trace strip chart thus ensuring

Card 1/6

L 41329-65

ACCESSION NR: AP4042119

the same time base. The gyroscope unit maintains the vertical reference axis with an accuracy of a few minutes of arc. The system and its operation are fully described and discussed. Its technical specifications are as follows: the range of measurement of ψ_m is $\pm 15^\circ$; maximum pitching frequency = 0.5 cps; range of measurement of ψ_m is $\pm 45^\circ$; maximum rolling frequency for an amplitude range up to $\pm 45^\circ$ is 0.6 cps; range of the measurement of acceleration is 10g; outside supply to the converters is 24V; supply of the measuring system is 36V, 400 cps; anode voltage of the amplifiers is 500 V; minimum measurable angle under static conditions: $\psi_m = \pm 8'$, $\psi_m = \pm 25'$; minimum measurable acceleration for 3g range is $a_z = \pm 0.05$ g; and for the 10 g range it is $a_z = \pm 0.15$ g; the uncertainty in angle measurements under static conditions and for mean readings: $\psi_m = \pm 2.5\%$, $\psi_m = \pm 2.5\%$. The system was designed in the Katedra Technologii Przemyslowej (Precision Instruments engineering department) and the Katedra Osprzetu Lotniczego (Aeronautical equipment department) of the Politechnika Warszawska (Warsaw polytechnic institute) on the order of the Centralne Biuro Konstrukcji Okretow nr 2 (Central shipbuilding bureau No. 2); in formulas.

Card 2/6

L 41323-05

ACCESSION NR: AP4042119

ASSOCIATION: Katedra osprzetu lotniczego Politechniki Warszawskiej (Aeronautical
equipment department, Warsaw polytechnic institute)

SUBMITTED: 00

ENCL: 03

SUB CODE: NG

NO REF SOV: 000

OTHER: 002

Card 3/6

L 42329-65

ACCESSION NR: AP4042119

ENCLOSURE: 01

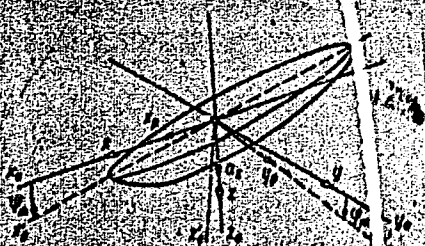


Fig 1. x, y, z - the gyroscope reference system associated with the earth's reference system; x_p, y_p, z_p - reference system of the ship's hull.

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4/6

Card

L 41329-65

ACCESSION NR: AP4042119

ENCLOSURE: 02

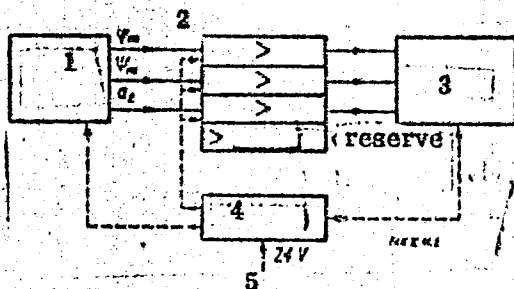


Fig. 2. Block diagram of the measuring system. 1 - gyroscope unit, 2 - Amplifiers, 3 - Recorder, 4 - dc to ac converters, 5- Accumulators.

Card 5/6

L L1329-65

ACCESSION NR: AP4042119

ENCLOSURE: 03

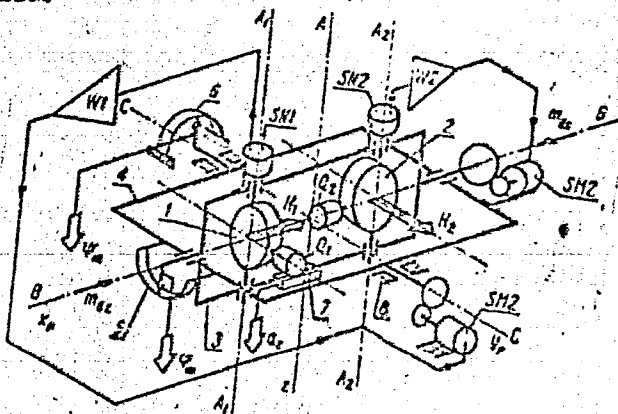


Fig. 3. Schematic diagram of the gyroscope system: 1, 2 - gyroscopes, 3 - internal frame; 4 - external frame; 5 - sensor for measuring ψ_m ; 6 - sensor for measuring φ_m ; 7 - sensor for measuring acceleration a_z ; 8 - body of the instrument SM1 and SM2 - servomotors, SN1 and SN2 stabilization signal sensors, W1 and W2 - amplifiers.

Card 6/6

KRECEK, J.; KRECKOVA, J.

Pharmacology of antihistamine drugs of Czechoslovakian preparation. Biol.listy Suppl.1:30-38 1950. (CIML 20:5)

1. Of the Control and Research Institute of the United Pharmaceutical Works and of the Department of General Physiology (Head Prof. F. Karasek, M.D.) of the Physiological Institute (Head--Prof. V. Laufberger, M.D.) of the Medical Faculty of Charles University, Prague.

KRECEK, J.; KRECKOVA, J.; VAIGENBACHER, V.

Effect of antihistamine substances on metabolism of pyruvic acid.
Biol.listy Suppl.1:54-61 1950. (CLML 20:5)

1. Of the Research and Control Institute of the United Pharmaceutical Works and of the Department of General Physiology (Head--Prof.F.Karasek,M.D.) of the Institute of Physiology (Head--Prof. V.Laufberger,M.D.), Prague.

Kreckova, J.

6 V The mechanism of the action of antihistamines. I. The effect of antihistamines on bacterial decarboxylation of histidine. J. Křeček, J. Šterzl, J. Křečková, and V. Valcenbacher (Výzkumný a kontrolní ústav Spofa, Prague). *Casopis Lékářů Českých* 89, 2-4(1959). (7)

histidine (I) decarboxylase in *Escherichia coli*, *Aerobacter aerogenes*, and *Pseudomonas aeruginosa* strains has been demonstrated. The organisms were grown on media contg. (1) I, (2) I + antihistamines (II) in concns. 1:500 and 1:5000, (3) glucose (III) + II. The same inhibition of growth by II was observed in organisms growing on media contg. I which is utilized by decarboxylation, as in those growing on media with III. The selective inhibition in- fluence of II on decarboxylation of I was thus not demon- strated. III. The effect of antihistamines on the metabo- lism of glucides. Olga Benčová, Jiří Křeček, Jarmila Křečková, Jaroslav Šterzl, Vladimír Vaicenbacher, and Emil Zikmund (Výzkumný a kontrolní ústav Spofa, Prague). *Ibid.* 700-11. —Antihistamines (I), Neoantergan, Pyribenz- amine, and Antihistamine Spofa (benzhydrolpiperi dine ethyl ether), increase, in doses of 10-50 mg./kg., the level of glucose (II) and pyruvic acid (III) in the blood of rabbits. The increase of II is proportional to the pharmacological activity of these I. Simultaneous administration of hist- amine in doses of 0.1-10 mg./kg. interferes with hypergly- cemia, but does not affect the III level. It is suggested that I play a role in the catabolism of II which can be correlated with the pharmacological action of I. A. Zentšek

KRECKOVA, J.

BENESOVA, O.; KRECEK, J.; KRECKOVA, J.; STERZL, J.; VAIGENBACHER, V.;
ZIKMUND, E.

Effect of antihistaminic substances on the metabolism of glucides;
study of the mechanism of the effect of antihistaminic substances.
Cas.lek.cesk. 89 no.25:709-711 23 June 50. (CJML 19:4)

1. Of the Institute for Control and Research SPOFA, of the Department
for General Physiology (Head--Prof. F.Karasek, M.D.) of the Physio-
logical Institute of the Medical Faculty at Charles University (Head--
Prof. V.Laufberger, M.D.), and of the Institute for Medical Micro-
biology and Immunology at Charles University (Head--Prof. F.Patocka,
M.D.)

Hahn, P.; Koldovsky, O.; Krecek, J.; Kreckova, J.

Development of aerobic metabolism in the brain of young rats.
Chekh.fiziol.2 no.2:171-177 '53. (MLRA 7:2)

1. Biologicheskiy institut Chekhoslovatskoy Akademii nauk,
fiziologicheskoye otdeleniye, Praha. (Brain)

KOLDOVSKY, O.; KRECEK, J.; KRECKOVA, J.; MIKULAS, I.

The influence of rearing in the dark on the development of water metabolism in young rats. Chekh fiz 2 no.4:267-272 '53. (EEAL 3:7)

1. From the Biological Institute of the Czechoslovak Academy of Science, Physiology Department, Prague.

(DARKNESS, effects,

*on water metab. in young rats)

(WATER, metabolism,

*eff. of darkness in young rats)

KRECEK, J.; KRECKOVA, J.; DLOUHA, H.

On problems of the regulation of water intake in newborn mammals.
Physiol. bohém. 5:33-37 Suppl. 1956.

1. Institute of Physiology, Czechoslovak Academy of Sciences, Prague.

(THIRST, physiology,

water intake & selection of fluids in rats weaned at
various ages)

(WATER, metabolism,

intake & selection of fluids in newborn rats weaned at
various ages.)

(INFANT, NEWBORN,

water intake & selection of fluids by newborn rats weaned
at various ages)

(BODY FLUIDS, metabolism,

water-electrolyte balance, role in water intake & fluid
selection by newborn rats after weaning)

HAHN, P.; KRECEK, J.; KRECKOVA, J., with the technical collaboration
of J. Chylkova.

The development of thermoregulation. I. The development of
thermoregulatory mechanisms in young rats. *Physiol. bohém.*
5 no.3:283-290 1956.

1. Institute of Physiology, Academy of Science, Prague.
(BODY TEMPERATURE,
thermoregulation, develop. in young rats)

HAHN, P.; KRECEK, J.; KRECKOVA, J.

Development of thermoregulation. I. Development of thermoregulation mechanism in young rats. Cesk. fysiол. 5 no.3:295-301 1956.

1. Fysiologicky ustav Cs. akademie ved, Praha.
(BODY TEMPERATURE,
thermoregulation, develop. in young rats (Cz))

CZECHOSLOVAKIA/Human and Animal Physiology (Normal and Pathological). Metabolism. Water and Salt Exchange.

T-2

Abs Jour : Ref Zhur- Biol., No 11, 1958, 50469

Author : Drecak, J., Kreckova, J.

Inst : -

Title : The Development of Regulated Water Metabolism. III.
The Interrelationship Between Regulated Intake of Water and Milk in Young Rats.

Orig Pub : Ceskosl. fysiolo., 1957, 6, No 1, 14-11

Abstract : Some rats were given a free choice of food and fluids (Larsen's ration, milk, or water). Two time periods of the rats' ontogenesis were earmarked for this test: the 1st period lasting until the age of 14 to 16 days, during which the young rats could only absorb food in the form of their mother's milk; the second period lasting until the rats were about 24-29 days old, and during which a gradual development and a fixation in the

Card 1/2

CZECHOSLOVAKIA/Human and Animal Physiology (Normal and Pathological). Metabolism. Water and Salt Exchanges.

T-2

Abs Jour : Ref Zhur - Biol., No 11, 1958, 50469

reaction of the organism to osmotic pressure (of a 6 percent NaCl solution) has taken place. At the begin of the rats; 14th-16th day of life, they still preferred to consume milk. This preference for milk was also preserved when osmotic pressure existed. In this case, however, 14-16 day old rats drank the fluid much slower than did somewhat older rats. Not before the age of 29 days was a preference for water observed after a NaCl infusion. Younger rats (from 17 days of age up) are capable of absorbing larger amounts of water only then when the water is the sole fluid which has been offered to them.

Card 2/2

- 4 -

KRECKOVA, J.

KRECEK, J.; KRECKOVA, J.; MARTINEK, J.

Development of thermoregulation. V. Effect of breeding young rats in cold and warm environment on the development of thermoregulation. Genk. fysiolo. 6 no.3:341-346 Aug 57.

1. Fysiologicky ustav CsAV v Praze.

(BODY TEMPERATURE, physiology

thermoregulation in young rats raised in cold & warm environments (Cz))

(COLD, effects,

thermoregulation in young rats raised in cold environment (Cz))

(HEAT, effects,

thermoregulation in young rats raised in warm environment (Cz))

KRECEK, J.; DLOUHA, H.; KRECKOVA, J.

Effect of vasopressin on the elimination of water load, sodium and potassium in weaning rats. Cesk. fyziol. 7 no.1:30-31 1958.

1. Fysiologicky ustav CsAV, Praha Predneseno na pravidelne schuzi fysiologicke spolecnosti v Praze dne 30. X. 1957.

(SODIUM, in urine,

eff. of vasopressin in weaning rats (Cz))

(POTASSIUM, in urine,

same)

(VASOPRESSIN, effects,

on urinary potassium & sodium & urination in weaning rats (Cz))

KRECKOVA, J. ; KRECEK, J. ; DIOUHA, H.

"Effect of cortisone and D.O.C.A. on the secretion of water, Na, and K following water intake in young rats." p. 211.

CESKOSLOVENSKA FYSIOLOGIE. Praha, Czechoslovakia, Vol. 7, no. 3, May 1958.

Monthly List of East European Accessions (EEAI), LC, Vol. 8, No. 8, August 1959.
Uncl.

DLOUHA, H.; KRECEK, J.; KRECKOVA, J.

Role of the adrenals and of the pituitary in changes of renal reactivity to water load in young rats during weaning. *Cesk. fysiolog.* no.5:442-443 Sept 58..

1. Fysiologicky ustav CSAV, Praha.

(KIDNEYS, physiolog.)

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Uncl.

Z/002/60/000/005/003/006
A205/A126

AUTHOR: Krečmer, V., Engineer, Candidate of Science

TITLE: Session With Industry Workers on Meteorological Instruments

PERIODICAL: Věstník Československé akademie věd, no. 5, 1960, 522 - 525

TEXT: Porada s pracovníky průmyslu o meteorologických přístrojích (Session With Industry Workers on Meteorological Instruments) was held in summer (Abstractor's Note: year not given) at the METRA National Enterprise in Prague. The session was organized by the Bioklimatická komise ČSAV (Bioclimatic Commission of the Czechoslovak Academy of Science) and was attended by members of various institutes and organizations working in this field. The subject of the session was the production status and maintenance of meteorological instruments used for research in biometeorology and biomedicine and for practical purpose, especially in agriculture, medicine and certain industrial branches. The obsolete assortment and poor quality of meteorological equipment produced in the ČSSR was already criticized by Academician Novák, President of the Bioclimatic Commission, ČSAV, at the IInd All-State Bioclimatic Conference and on many other occasions. However, this criticism ✓

Card 1/2

Session With Industry Workers on...

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did not yet produce any positive results, due to the lack of cooperation between producers and consumers. Meteorological instruments are distributed through "Laboratorní potřeby", National Enterprise, retail stores, and producers were mostly unaware of the practical needs of consumers calling for more sensitive, more accurate and reliable instruments, especially such with electrical telerecording of measured data. The scope of the session was to confront producers of meteorological equipment (the METRA Plant is the main producer in the ČSSR) with practical needs. It was suggested to expand the production program (which until now comprises only instruments with mechanical recording devices) to improve the quality, and to introduce the production of new meteorological instruments meeting world standards. Since a direct delivery of meteorological equipment, eliminating "Laboratorní potřeby" retail stores, cannot be realized, it was suggested to improve the contact between producers and consumers in any possible way. This can be achieved with the aid of the "Hydrometeorologický ústav" (Hydrometeorological Institute) and its publication, the journal "meteorologické zprávy" (Meteorological News). It was also suggested that representatives of plants, producing meteorological equipment, be invited to bioclimatologic and meteorologic conferences and symposia.

Card 2/2

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