

Study of Radiation Processes

SOV/2548

are shown. Individual articles deal with the methodology of actinometric observations. No personalities are mentioned. References accompany each article.

TABLE OF CONTENTS:

Boldyrev, N. G., and O. D. Barteneva. Visual Methods for Determining the Meteorological Range of Visibility and Testing These Methods on the Hydrometeorological Station Network	3
Makhotkin, L. G. Results of Studying Variations in Direct Solar Radiation	11
Makhotkin, L. G. Regularities in Scattered Radiation Changes Under a Cloudless Sky	17
Makhotkin, L. G. Computing the Possible Diurnal Totals of Direct Radiation	23
Grishchenko, D. L. Relationship Between Albedo of the Sea and the Solar Altitude and Agitation of the Sea Surface	32
Barteneva, O. D., and A. A. Butylev. Visibility of Color Lights Under Field Conditions	39

Card 2/3

Study of Radiation Processes

304/2548

Ter - Markaryants, N. Ye. Computing the Albedo of Water Surfaces	45
Barashkova, Ye. P. Certain Regularities in the Regime of Total Radiation	51
Barashkova, Ye. P. Scattered Radiation in Karadag	70
Barashkova, Ye. P. Computing the Daily Sums of Total Radiation According to Standard Observations	88
Barashkova, Ye. P. Turbidity of the Atmosphere in Karadag	97
Golikov, V. I. The Problem of Measuring Infrared Radiation With an Instrument Protected by a Polyethylene Windshield	112
Gulyayev, B. I. Spectral Error of Instruments Measuring Plant Radiation	126
Gulyayev, B. I. Computing the Cosine Characteristic of Instruments Constructed With a Convex Transparent Glass	135

AVAILABLE: Library of Congress

Card 3/3

MM/lsh
11-3-59

BARTENEVA, O.D.

Scattering indicatrices of light in the atmosphere near the ground.
Izv. AN SSSR. Ser. geofiz. no.12:1852-1865 D '60. (MIRA' 13:12)

1. Glavnaya geofizicheskaya observatoriya im. Voyeykova.
(Light--Scattering)

BARTENEVA, O.D.; BOYAROVA, A.N.

Brightness of the twilight and night sky. Trudy GGO no.100:
133-140 '60. (MIRA 13:6)
(Photometry) (Night sky) (Twilight)

S/196/62/000/008/012/017
E032/E514

3,5150

AUTHOR: Barteneva, O.D.

TITLE: A study of light-scattering functions for the atmospheric layer near the Earth's surface

PERIODICAL: Referativnyy zhurnal, Elektrotehnika i energetika, no.8, 1962, 3, abstract 8V14. (Sb. "Aktinometriya i atmosfern. optika". L., Gidrometeoizdat, 1961, 187-206)

TEXT: A report is given of the results of 715 measurements of light scattering functions for air obtained in 1956-1959 under different meteorological and geographical conditions with atmospheric transparency between 0.4 and 220 km. The measurements were carried out with a type ИФ-14 (IF-14) nephelometer with a variable angle of observation (GOI, Leningrad). The form of the scattering function (indicatrix) is very dependent on the state of the atmosphere. A correlation was established between the form of the scattering function, characterized by the coefficient of light-flux asymmetry, and the meteorological visibility range. It was confirmed that the magnitude of the
Card 1/2

✓
B

A study of light-scattering ...

S/196/62/000/008/012/017
E032/E514

V
B

integral scattering of light, which represents the transparency of the atmosphere, is unambiguously related to the amount of light scattered at 45° to the direction of propagation of the incident radiation. 10 figures, 22 references.

[Abstractor's note: Complete translation.]

Card 2/2

BARTENEVA, O.D.; BASHILOV, G. Ya.

Nephelometric method of measuring atmospheric transparency.
Izv. AN SSSR. Ser. geofiz. no.4:613-619 Ap '61. (MIRA 14:3)

1. Glavnaya geofizicheskaya observatoriya im. A. I. Voyeykova.
(Atmospheric transparency)
(Nephelometric analysis)

S/169/61/000/011/040/065
D228/D304

AUTHORS: Boldyrev, N.G., and Barteneva, O.D.

TITLE: The connexion of the threshold of the sensitivity contrast with the acuteness of vision taken as the basis of calculation of the visibility range of objects

PERIODICAL: Referativnyy zhurnal, Geofizika, no. 11, 1961, 28, abstract 11B:205 (Tr. Gl. geofiz. observ., no. 109, 1961 53 - 60) ✓

TEXT: The dependence of the threshold of the sensitivity contrast on the angular dimensions of an object under observation should be taken into account when calculating the visibility range of actual objects which, as a rule, have small angular dimensions. N.G. Boldyrev, has proposed the following formula for determining the threshold contrast of an object with angular dimensions:

$$(K - \varepsilon)\gamma^2 = (1 - \varepsilon)\delta^2,$$

where ε is the threshold of the sensitivity contrast, and δ is the
Card 1/2

The connexion of the threshold ...

S/169/61/000/011/040/065
D228/D304

least resolvable angle characterizing the visual acuteness of an observer $V = 1/5$. The results are stated for verifying the formula by the experimental data of O.D. Barteneva and by literature data. The authors conclude that the proposed formula does not contradict their experimental data. [Abstractor's note: Complete translation].

Card 2/2

27.6340

31256
S/531/61/000/118/001/004
D218/D302

AUTHORS: Boldyrev, N. G., and Barteneva, O. D.

TITLE: Range of visibility of real objects at twilight and at night

SOURCE: Leningrad. Glavnaya geofizicheskaya observatoriya. Trudy. No. 118, 1961. Issledovaniye radiatsionnykh protsessov, 3-16

TEXT: The authors developed a method and an apparatus for studying the threshold of contrast sensitivity and acuity of vision under laboratory and field conditions as a function of the background illuminations. In the laboratory experiments, the screen on which the objects were observed was given the form of a cloudy sky and the objects had forms resembling the silhouettes of natural objects. Binocular vision was used without any optical aids. Extraneous light was excluded from the eyes of the observers. The method is illustrated schematically in Fig. 2. The image of the object O was projected on to the screen K with the aid of the pro-

Card 1/4₃

31256

Range of visibility ...

S/531/61/000/118/001/004
D218/D302

jection lantern S_1 , which was also used to illuminate the screen. The distance S_1K was kept constant. A further lantern S_2 could be moved along the line MN. In this way the object could be made to disappear or otherwise, and the contrast sensitivity threshold could be determined. The objects were in the form of simple geometrical shapes (circle, square, rectangle, triangle, pendulum). The angular dimensions of the objects were about 5° . The ten observers who took part in the experiment all had normal vision. The contrast sensitivity threshold was found to be independent of the shape of the object. In addition, field experiments were carried out to determine the twilight sky illumination at which the observers could detect standard contrasts of 0.11, 0.22, 0.44 and 1 with large angular dimensions. Four observers were employed with 20-minute adaptation in open space. The results obtained under the various conditions are given graphically, showing the contrast sensitivity threshold as a function of background illumination for objects with large angular dimensions. The dependence of the acuity of vision on the background illumination was obtained by analyzing

Card 2/43

31256

Range of visibility ...

S/531/61/000/118/001/004
D218/D302

published information and the results obtained are summarized graphically. Theoretical expressions are then derived for the light intensity distribution over the twilight sky, and a table of numerical values is given for various field conditions. The final section is concerned with calculating the visibility of real objects at twilight and at night. Systematic observations of real objects (e.g. a church at a distance of several kilometers, a water tower, and so on) showed that the methods developed for calculating the range of visibility during daylight also hold at twilight and at night. Acknowledgments are expressed to A. N. Boyarova, who took part in the observations and the analysis, T. F. Sa-
lezneva, who took part in the processing of the data, and G. Ya. Bashilov, who checked the method of calculating the range of visibility of distant objects in the Odessa Hydrographic Region. There are 4 figures, 5 tables and 28 references: 20 Soviet-bloc and 8 non Soviet-bloc. The 4 most recent references to the English-language publications read as follows: S. Q. Duntley: Visibility of distant objects. JOSA, 38, 1948; Perry Moon: The scientific basis of illuminating engineering. New York and London, 1936; H. R.

Card 3/A₃

BARTENOVA, O.D., kand.fiz.-matem.nauk; BOYAROVA, A.N., inzh.

Lighting conditions at dusk and at night. Svetotekhnika 10 no.3:
11-17 Mr '64. (MIRA 17:3)

1. Glavnaya geofizicheskaya observatoriya.

BARTENEVA, O.D.

Calculating the visibility range of objects projected on various backgrounds at twilight and at night. Trudy GGO no. 153:5-10 '64. (MIRA 17:9)

DARLENEVA, O.D.

PASTINETS, O.D.; SOLYANKOVA, Ye.P.

Light equivalent of radiation under conditions of a dry atmosphere.
Trudy OGO no. 1493-40 166. (MIRA 25:8)

1 52553-25

ACCESSION NUMBER 152553-25

REF ID: A661020180-207

AUTHOR: Artemova, G. I.; Polyakova, Y. A.

TITLE: A study of the attenuation and scattering of light in natural fog due to its microphysical properties

SOURCE: AN SSSR Izvestiya. Fizika atmosfery i okeana, v. 1, no. 1, 1965, pp. 207

TOPIC TAGS: fog; light attenuation; fog; light scattering; fog; microphysical property; fog; transparency; fog; water content; scattering; indicatrix

ABSTRACT: The study of the optical properties of fog involves the study of the optical properties of individual fog particles and the turbid medium as a whole. A basic difference between the optical properties of fog and those of other turbid media is that the particles in fog are of a wide size range and are distributed in a nonuniform manner. The optical properties of fog are studied by means of scattering indicatrix and microphysical property measurements. The results of these measurements are used to determine the optical properties of fog. The results of these measurements are used to determine the optical properties of fog. The results of these measurements are used to determine the optical properties of fog.

Card 1/2

L 52553-65

ACCESSION NR AP5009236

these two integral characteristics is shown and the scattering indicatrix is depicted

the scattering indicatrix is depicted

the scattering indicatrix is depicted

the scattering indicatrix is depicted

the scattering indicatrix is depicted

the scattering indicatrix is depicted

the scattering indicatrix is depicted

ASSOCIATION OF THE SCIENTISTS OF THE USSR ACADEMY OF SCIENCES

INSTITUTE OF PHYSICS OF THE USSR ACADEMY OF SCIENCES

SUBMITTED BY: [illegible]

PN: [illegible]

SYMPTOM: [illegible]

NO REF SOV: 024

OTHER: 007

384 22

BARTENEVA, O.D., kand. fiz.-matem. nauk; POLYAKOVA, Ye.A., kand. fiz.-matem. nauk

Light equivalent of radiation. Meteor. i gidrol. no.2:19-22 F '66.
(MIRA 19:1)

1. Glavnaya geofizicheskaya observatoriya. Submitted May 25, 1965.

L 37179-66 ENT(1)/FCC GW

ACC NR: AP6027807

SOURCE CODE: UR/0050/66/000/002/0019/0022

AUTHOR: Bartonova, O. D. (Candidate of physicomathematical sciences); Polyakova, Yo. A. (Candidate of physicomathematical sciences)

ORG: Main Geophysical Observatory, Moscow (Glavnaya geofizicheskaya observatoriya)

TITLE: Light equivalent of radiation

SOURCE: Meteorologiya i gidrologiya, no. 2, 1966, 19-22

TOPIC TAGS: solar radiation, atmospheric optic phenomenon, practical meteorology

ABSTRACT: The light equivalent of radiation is the ratio of the value of illumination in thousands of lux to the simultaneous value on the intensity of solar radiation in $\text{cal cm}^{-2}\text{min}^{-1}$. In this study an investigation was made to determine the possibility of using a constant value of the light equivalent for different points with different meteorological conditions: such as differences in the values of the light equivalent at stations over which the atmosphere is characterized by a higher or lower humidity, that is, differences in true absorption by water vapor and aerosols of different type. Such studies were made in the Pamirs in 1963 and near Leningrad in 1964; the meteorological parameters in the two areas were considerably different. This is the first time such a comparison has been made.

Card 1/2

UDC: 551.521

L 37179-66

ACC NR: AP6027807

Analysis of the data revealed that a single value of the light equivalent could be recommended for all geographical latitudes. This finding and the other relationships and data presented in the article can be used when computing the normal values of daytime illumination of a horizontal surface and compilation of maps of light climate on the basis of data from actinometric stations. However, the results cannot be used for solar altitudes of less than 5° above the horizon. Orig. art. has: 2 figures and 1 table. JPRS

SUB CODE: 03, 04 / SUBM DATE: 25May65 / ORIG REF: 004 / OTH REF: 004

Card 1/2 MLP

KHANINA, F.B.; BARTENEVA, O.N.

Correction of orbits of 16 minor planets. *Biul. Inst. teor.
astron.* 6 no.2:133-150 '55. (MIRA 13:3)
(Planets, Minor) (Orbits)

BARTENEVA, O.N.

New elements of the minor planet 260 Huberta. Biul.Inst.teor.
astron. 6 no.2:151-152 '55. (MIRA 13:3)
(Planets, Minor)

BARTENEVA, O.N.

Determining the original orbit of Shain-Comas Sola comet
(1925 VII). Biul. Inst. teor. astron. 6 no.4:249-254 '55.
(MIRA 13:3)

(Comets--1925)

BARTENEVA, O.H.

New elements of eight minor planets. *Biul. Inst. teor. astron.*
6 no.7:493-502 '57. (MIRA 13:3)
(Planets, Minor)

S/035/60/000/010/005/021
A001/A001

Translation from: Referativnyy zhurnal, Astronomiya i Geodeziya, 1960, No. 10,
pp. 11-12, # 9837

AUTHORS: Khanina, F. B., Barteneva, O. N.

TITLE: An Investigation of the Motion of the Comet Fay, Report 2. The Orbit
of the Comet Fay From Observations of 1932-1933, 1939-1940 and
1947-1948

PERIODICAL: Byull. In-ta teor. astron. AN SSSR, 1959, Vol. 7, No. 6, pp. 466-477 ✓
(English summary)

TEXT: In this article, which is a continuation of the work by V. V. Zheverzheyev (Byull. In-ta teor. astron. AN SSSR, 1952, Vol. 5, No. 2, p. 97), the compilation of three appearances of the comet Fay from 1932 to 1948 was performed. To obtain initial data, two appearances of 1932/33 and 1939/40 were first jointly processed on the basis of normal positions given by V. F. Zheverzheyev, and the initial instant was adopted from the second comet appearance. (1939, November 3, 0). From that instant numerical integration was carried out

Card 1/3

S/035/60/000/010/005/021
A001/A001

An Investigation of the Motion of the Comet Fay, Report 2. The Orbit of the Comet Fay From Observations of 1932-1933, 1939-1940 and 1947-1948

backwards in special barycentric coordinates with allowance for the perturbations by the planets, from Mercury to Uranus. Integration, with a subsequent improvement of elements, was carried out 4 times with increasing accuracy. During the last time the perturbing forces were calculated with an accuracy up to 10^{-10} , the functions f_x , f_y and f_z up to 10^{-9} and coordinates x , y and z up to 10^{-8} . The elements and coordinates at the initial instant, calculated on the basis of this integration, were adopted as initial ones for the joint processing of the three appearances. With this purpose, integration was continued up to 1948 and the elements were improved on the basis of 11 normal positions of V. F. Zheverzheyev and 3 normal positions obtained from the observations of 1947/48. After a twofold improvement, corrections to osculating elements were obtained for the initial instant with the corresponding errors. The error of one normal position $\xi = \pm 2''$. The system of elements was obtained. Epoch and osculation: 1939, November 3, 0 ephemeris time.

Card 2/3

S/035/60/000/010/005/021
A001/A001

An Investigation of the Motion of the Comet Fay, Report 2. The Orbit of the
Comet Fay From Observations of 1932-1933, 1939-1940 and 1947-1948

$M_0 = 336^{\circ}, 88772$	$\omega = 200^{\circ}, 53964$	} 1950,0
$\varphi = 34^{\circ}, 41832$	$\Omega = 206^{\circ}, 37317$	
$\alpha = 3, 8035962$	$i = 10^{\circ}, 55169$	

$\mu = 478", 31606$

T = 1940, April 24, 95236

N. S. Yakhontova

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

Card 3/3

BARTENEVA, O.N.

Some auxiliary tables for integration by Cowell's method.
Biul.Inst.teor. astron. 7 no.9:729-737 '60. (MIRA 14:3)
(Calculus, Integral)

KHANINA, F.B.; BARTENEVA, O.N.

Investigating Faye's comet. Communication No.3. The orbit of
Faye's comet from observations in 1923-1933, 1939-1940,
1947-1948, 1954-1955. Bull.Inst.teor.astron. 8 no.3:229-239
'61. (MIRA 14:11)

(Comets)

GALIBINA, I.V.; BARTENEVA, O.N.

Final orbit for the comet Johnson 1950 I. *Biul. Inst. teor. astron.*
10 no.3:192-203 '65. (MIRA 18:8)

BARTENVA, V.S.

Extracurricular study of the technology of railroad transportation.
Politekh. obuch. no.3:76-78 Mr '58. (MIRA 11:2)
(Railroads--Employees--Education and training)

ACCESSION NR: AP4013653

G/0004/64/011/002/0084/0088

AUTHOR: Bartenev, G. M. (Professor, Doctor)

TITLE: Principle and laws of the vitrification processes of polymers

SOURCE: Plaste und Kautschuk, v. 11, no. 2, 1964, 84-88

TOPIC TAGS: polymer vitrification, polymer solidification, structural vitrification, mechanical vitrification, polymer phase transition

ABSTRACT: The phenomenon of mechanical "vitrification" under low pressure, i.e. when the structure of a polymer remains untouched by mechanical effects, is described by examining the molecular-kinetic nature of the structural vitrification and resulting changes of the physical properties. The dissimilarities of phase transitions and vitrification are pointed out, the major ones being: 1. the ability of an unlimited lowering of the vitrification temperature -- down to 0° K -- through reduction of the speed of cooling while maintaining a complete thermodynamical balance of the system at all temperatures; 2. rise of the vitrification temperature with increasing speed of cooling, contrary to the undercooling processes during phase transitions; 3. great variation in the

Card 1/3

ACCESSION NR: AP4013653

temperature dependences during heating of glasses if the heating speed is greater at one time and lower at another during the production of the glass; 4. opposite sign of the jumps of the specific heat during vitrification and phase transitions of type 2. Under no conditions occur boundary areas between a liquid and a "glassy" phase during vitrification, i.e., contrary to thermodynamical conditions, the glassy condition represents the existence of an imbalance. Examined is furthermore the transition of liquids from the viscous to the elastic condition. It is pointed out that the mechanical "vitrification" of polymers is a transition from the high-elastic to the elastic-solid condition not connected with the structural vitrification. The basic characteristics of mechanical "vitrification" are stated, developed, and then expressed in formulas (7) and (8).

$$\frac{1}{T_M} = B_1 - B_2 \cdot \lg v, \quad (7)$$

whereby

$$B_1 = B_2 \left(\frac{b}{2,3k} + \lg \frac{C'}{r_0} \right); B_2 = \frac{2,3k}{U_0}. \quad (8)$$

Orig. art. has: 10 figures and 8 formulas.

Card 2/82

NUMBER 11

AUTHOR: Barfenow, V.V. Professor, Doctor

S

17

TITLE: Structure and viscosity of linear polymers

Journal of Applied Chemistry, no. 11, 1964, 16-17

As the Debye-Hückel theory of viscous flow is reviewed in the light of new experimental data, the author considers the possibility of a general theory of the structure of linear polymers and the nature of their interaction with the solvent. The author also considers the possibility of a general theory of the structure of linear polymers and the nature of their interaction with the solvent. The author also considers the possibility of a general theory of the structure of linear polymers and the nature of their interaction with the solvent.

Coro 1/2

100-100000

100-100000

ABSTRACT: Latent and acute problems of the theory of polymers. Staatliches
Institut für Polymerforschung, Dresden, Germany. 1974. 100 pages. 100-100000

SUBMITTED: 00

ENCL: 00

SUB CODE: 00, 72

NO REF SOV. 012

OTHER: 014

BARTENJEV, D.

"Matis' calculator, the method for angular designs and the method for curved design."

p. 32 (Zeleznice) Vol. 13, no. 10, Oct. 1957
Belgrade, Yugoslavia

SO: Monthly Index of East European Accessions (EEAI) LC. Vol. 7, no. 4,
April 1958

BASOV, F., inzh.; BARTEN'YEV, A., inzh.

New building machinery. Stroitel' no.2:27 P '60.

(MIRA 13:5)

(Building machinery)

CZECHOSLOVAKIA/Cultivated Plants - Potatoes. Vegetables.
Melons. etc.

M.

Abs Jour : Ref Zhur - Biol., No 4, 1958, 15597

Author : E. Bartes

Inst : -

Title : The Potato Harvest and Its Storage.
(Uborka kartofelya i yego khraneniye).

Orig Pub : Socialist. zemed., 1956, 6, No 19, 1169-1173.

Abstract : Research on seed potato harvest and storage made at the seed raising farm at Gavlichkov Brod (Czechoslovakia). Data is given on loss in weight when storing both healthy tubers and those having various diseases. The most storable varieties are the Krasava, Universal, Triumph, Ackersegen, Ambra and the Voran; the average storable kinds were the Erstling, Kiting, Bit'ye, Rapid, Blanik; and the poorly storable varieties are the Parnasse and Boyar. Recommendations are given for harvesting and placing the tubers in storage.

Card 1/1

BARTEV, G., kapitan pervogo ranga zapasa

It's crowded now on the "Avrora", Grazhd. av. 22 no. 11:8

N '65.

(MIRA 18:12)

BARTFAI, Bela. TEREKHOV, V.F., inzh. [translator]; POTOLITSYN, B.A., inzh. [translator]; KUPTSOV, I.I., inzh., red.; STROGANOV, L.P., red. izd-va; TIKHANOV, A.Ya., tekhn. red.

[Handbook on electroplating; translated from the Hungarian] Spravochnik gal'vanostega. Moskva, Mashgiz, 1960. 396 p. (MIRA 14:12)
(Electroplating)

44650
S/196/63/000/001/002/035
EO21/E155

26,2521

AUTHORS: Bártfai, Béla; Bártfai, Miklós; Hajdú, László;
Rónai, Béla; and Szücs, József

TITLE: Silver electrode of a silver-zinc cell and its method
of preparation

PERIODICAL: Referativnyy zhurnal, Elektrotehnika i energetika,
no.1, 1963, 21, abstract 1 A 132 P. (Hung. pat. cl.2lb,
6 - 14, no.148897, December 31, 1961)

TEXT: The customary pressing of electrodes from Ag or Ag₂O
powder utilises only 15-20% of their volume, because the
electrolyte cannot fully penetrate. It is proposed to use a core
of silver (e.g. spiral wire) with Ag₂O formed on its surface by
electrolytic chlorination and subsequent electrolytic oxidation.
The ratio of Ag to Ag₂O can vary from 1:100 to 100:1. The coating
adheres well to the Ag and acts as a depolarizer. The discharge
current can be up to 200 mA hr/g and the diameter of the wire for
the core 0.3 - 0.4 mm. X

Card 1/1 [Abstractor's note: Complete translation.]

BARTPAI, Csaba

The Orion "AT 650"-type television receiving set. (To be contd.)
Radiotechnika 13 no.2:59-62 F '63.

BARTFAI, Csaba

The Orion "AT 650" television receiver.(Conclusion). Radiotechnika
13 no.3:103 Mr '63.

BARTFAI, Csaba

~~_____~~
Remote control for the "AT-650"-type television set. Radiotechnika
13 no.5:184-185 My '63.

(A) BARTFAL, R

7

Sampling of anode copper. Ferenc Bartfai (Patakterleti
Allomás, Budapest). *Magyar Tech. Szep. Lapj* 1.
94 (1947).—The equations worked out by Brunton (*Trans.
Im. Ind. Min. Eng.* 23, KHM (1866)) and by Mika (*C.A.
22*, 1926) are modified for sampling anode Cu. 1. Finely

BARTFAI, F.

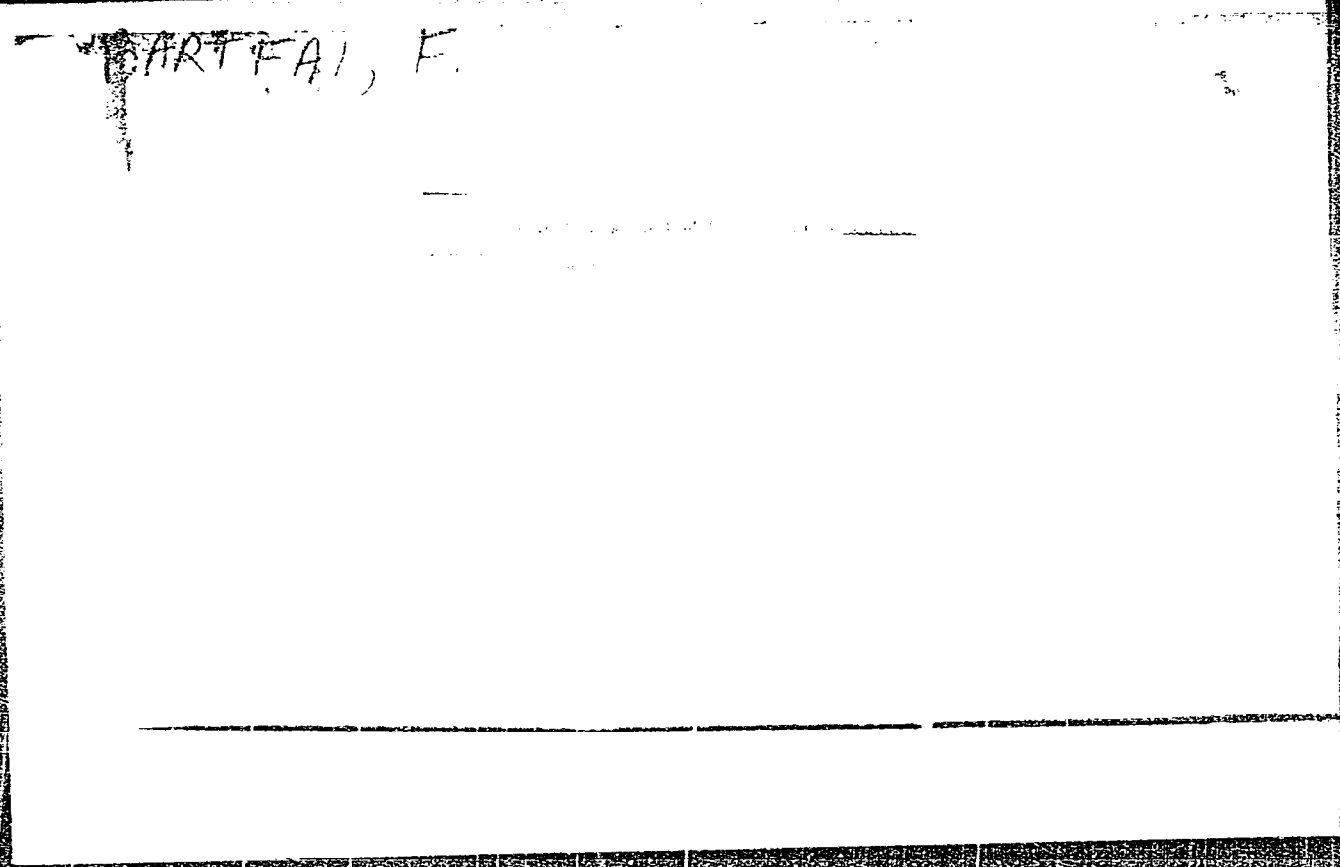
"An acid mixture for dissolving alloys with high silicon contents, " p. 105,
(KOHASZATI LAPOK, Vol. 8, no. 5, May 1953, Budapest, Hungary)

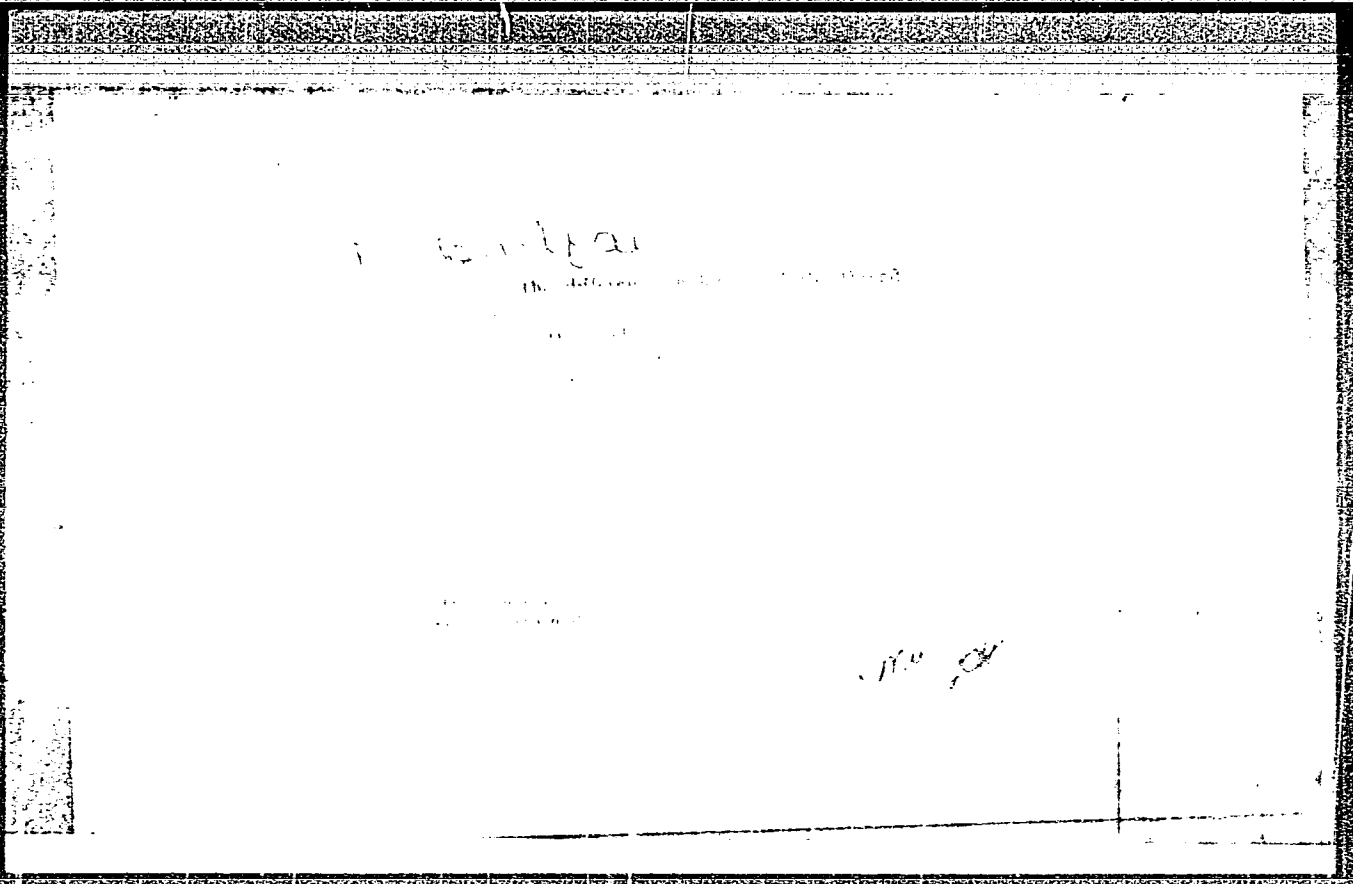
SO: Monthly List of East European Accessions, L.C., Vol. 2, No. 11, Nov. 1953, Uncl.

BARTFAI, F.

"Completion of a Procedure for Examination of Specific Weight", P. 252,
(NCHASZATI LAPCK, Vol. 9, No. 6, June 1954, Budapest, Hungary)

SO: Monthly List of East European Accessions (EEAL), I.C, Vol. 4, No. 3,
March 1955, Uncl.





BANFPAL, F.

"Remarks on Kardor Hajo's Article 'Theoretical Surface-Hardened Magnesium-Titanium Steel Alloys'", P. 254, (KÖZLEKÖZLÉSI LAPOK, Vol. 9, No. 6, June 1954, Budapest, Hungary)

SC: Monthly List of East European Accessions (EEAL), 10, Vol. 4, No. 3, March 1955, Uncl.

BARTFAI, F.

Nomograms for weight and atom (mol) percentage of tripartite systems. p. 227.
Vol 10, no. 5, May 1955. KOHASZATI LAPOK. Budapest, Hungary.

So: Eastern European Accession. Vol 5, no. 4, April 1956

~~FERENC, BARTFAL~~

BARTFAL Ferenc

HUNGARY/ Physical Chemistry - Thermodynamics. Thermochemistry. Equilibrium.
Physicochemical analysis. Phase transitions

B-8

Abs Jour : Referat Zhur - Khimiya, No 4, 1957, 11174

Author : Bartfal Ferenc

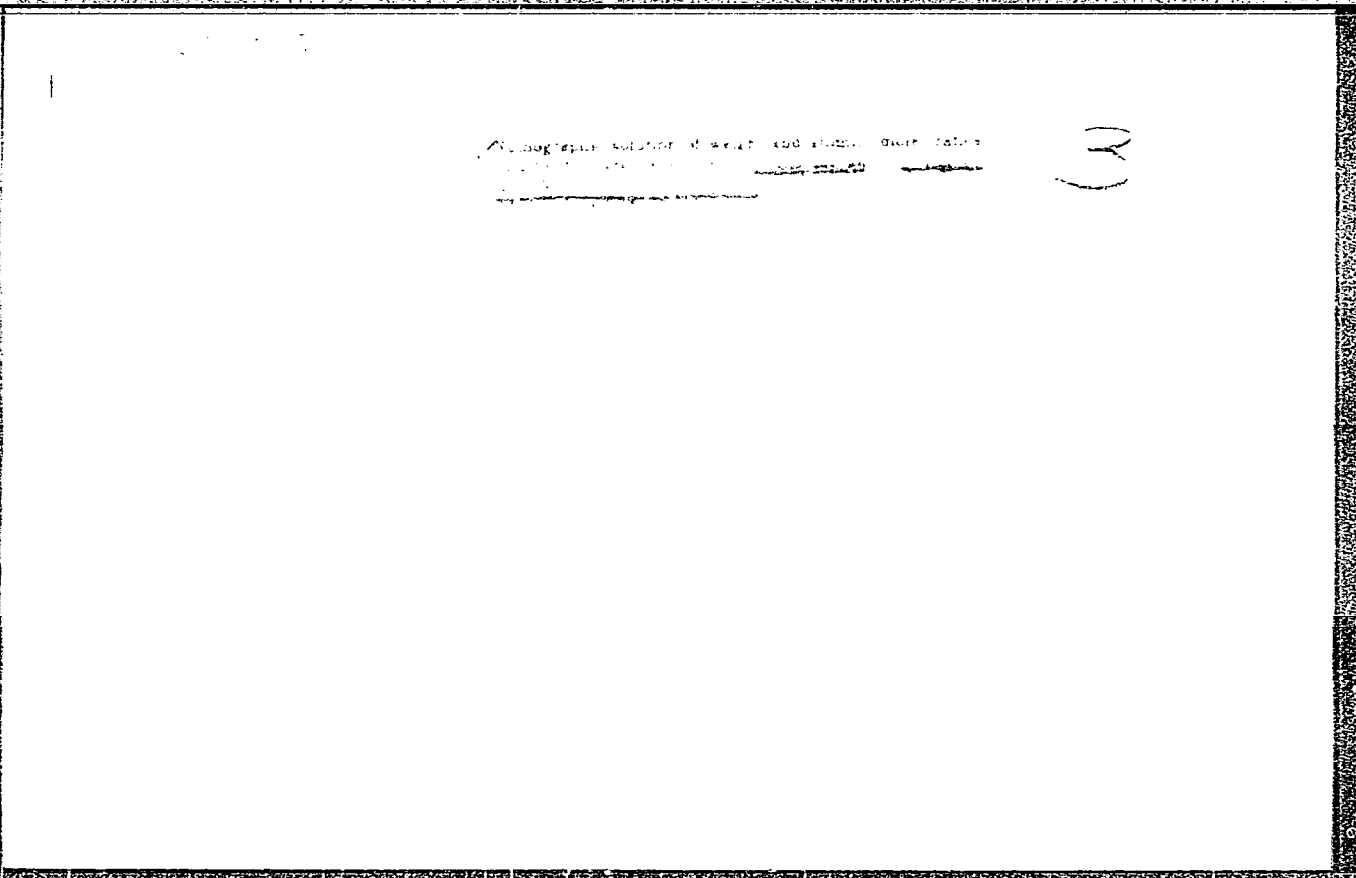
Title : Nomograph for Conversion of Weight- to Atomic Percent in Two-
Component Systems

Orig Pub : Nomogram ketalkotos rendszerek sulyes atom- (mol-) szazalek osszefuggesere.
Kohasz. lapok, 1956, 11, No 4, 173; (Hungarian)

Abstract : No abstract

Card 1/1

BARTEAL, F



BARTFAI, F.

Modern industrial hard magnetic materials.

p. 311. (AUTO-MOTOR) Vol. 10, no. 20, Nov. 1957
Budapest, Hungary

SO: Monthly Index of East European Accessions (EEAI) LC, Vol. 7, No. 3,
March 1958

HUNGARIAN TECHNICAL ABSTRACTS
1958, Vol 10, Nr 2

2

9. Nomographic solution of weight and atomic (mol) ratios in multicomponent systems. (In English) ~~E. Bartfal, A. Balogh. Acta Technica Academiae Scientiarum Hungaricae. Vol. 18, 1957, No. 1-2, pp. 13-20, 4 figs.~~

The known nomographic solution of the weight and atomic (mol) per cent ratios of binary systems has been extended by one of the authors to trinary

systems as well. The generalization of the solution for n-component systems with linear scales is presented on the basis of simple geometric relationships, such as similarity of triangles, projection on the angle bisector. Nomographically the solution is valid for the

following type of equation: $\frac{1}{a_n x_n} \sum_{i=1}^{n-1} a_i x_i = \left(\frac{1}{b_n} - 1\right)$

From among the advantages of the double-member chart these are the most outstanding: scales are linear, precision of reading can be improved, comparison scale factors can also be used.

KOMAROMY, Istvan, dr.; HOTOVY, Eleonora, dr.; technikai assistens: BARTFAI,
Imrene

Effect of acute hypoxia on cardiac patients with special reference to
venous pressure. I. Magy belorv. arch. 13 no.6:177-185 '60.

1. A Budapesti Orvostudományi Egyetem I sz. Belklinikájának (Igazgató:
dr. Ruzsnyák István egyetemi tanár) és a B. M. Egészségügyi Osztálya
Korvin Otto Kórházának közleménye.

(HEART DISEASES) (ANOXIA) (BLOOD PRESSURE)

KOMAROMY, Istvan, dr.; HOTOVY, Eleonora, dr.; Technikai assistens: BARTFAI,
Imrene

Effect of acute hypoxia on cardiac patients with special reference
to venous pressure. II. Magyar orvos. arch. 14 no.1:23-29 '61.

1. A Budapesti Orvostudományi Egyetem I sz. Belklinikájának (Igazgató:
dr. Ruzsnyak Istvan egyetemi tanár) és a B. M. Egészségügyi Osztálya
Korvin Otto Kórházának közleménye.

(HEART DISEASES) (ANOXIA) (BLOOD PRESSURE)

TOTH, Tamas, dr.; BARTFAI, Judit, dr.

Antihypertensive endocrine function of the kidney. Orv.hetil. 101
no.38:1344-1346 18 S '60.

1. Budapesti Orvostudományi Egyetem, Korelettani Intezet
(KIDNEY physiol.)
(HYPERTENSION exper.)
(ENDOCRINE GLANDS physiol.)

26,2521

S/196/63/000⁴⁴⁶⁵⁰/001/002/035
E021/E155

AUTHORS: Bártfai, Béla; ~~Bártfai, Miklós;~~ Hajdú, László;
Rónai, Béla; and Szücs, József

TITLE: Silver electrode of a silver-zinc cell and its method
of preparation

PERIODICAL: Referativnyy zhurnal, Elektrotehnika i energetika,
no.1, 1963, 21, abstract 1 A 132 P. (Hung. pat. cl.21b,
6 - 14, no.148897, December 31, 1961)

TEXT: The customary pressing of electrodes from Ag or Ag₂O
powder utilises only 15-20% of their volume, because the
electrolyte cannot fully penetrate. It is proposed to use a core
of silver (e.g. spiral wire) with Ag₂O formed on its surface by
electrolytic chlorination and subsequent electrolytic oxidation.
The ratio of Ag to Ag₂O can vary from 1:100 to 100:1. The coating
adheres well to the Ag and acts as a depolarizer. The discharge
current can be up to 200 mA hr/g and the diameter of the wire for
the core 0.3 - 0.4 mm. X

Card 1/1 [Abstractor's note: Complete translation.]

BARTFAI, Pal; DOBO, Andor

Data on a transportation problem. Mat kozl MTA 11 no.3:263-271 '61.

(Transportation)

HAJOS, Gyorgy; CSASZAR, Akos; PAL, Laszlo; TURAN, Pal; CORRADI, Keresztely;
KARTESZI, Ferenc; GALLAI, Tibor; GRATZER, Gyorgy; SCHMIDT, E.
Tamas; RENYI, Alfred; HETVEI, Gabor; BARTFAI, Pal; DEAK, Ervin;
KOVARI, Tamas

Mathematical problems. Mat lapok 13 no.1/2:174-183 '62.

1. "Matematikai Lapok" szerkeszto bizottsagi tagja (for Hajos).
2. "Matematikai Lapok" felelos szerkesztoje (for Turan).
3. "Matematikai Lapok" szerkeszto bizottsagi tagja (for Renyi).

BARTFAI, Pal

Problems of wandering by means of a reflecting wall. Mat
kut kozl MTA 8 A series no. 1/2:125-133 '63.

BARTFAI, Palne

A new measuring method for determining the durability of charge carriers. Hir-techn 15 no.3:71-74 Mr '64.

1. Research Institute of the Telecommunication Industry, Budapest.

BARTFAI SZABO, Laszlo

Investigation of radioactive pollution of surface waters in
Hungary conducted by the Scientific Research Institute of
Water Resources. Hidrologiai kozlony 41 no.3:255 Je '61.

HUNGARY / Plant Physiology. Mineral Nutrition.

I

Abs Jour: Ref Zhur-Biol., No 7, 1958, 29402.

Author : ~~Bartfai, T.~~

Inst : Not given.

Title : The Change in Phosphorus Compound Content in
Pea Plants during Development.
(Izmeneniye sodержaniya soyedineniy fosfora
v rasteniyakh gorokha v techeniye razvitiya).

Orig Pub: Novenytermeles, 1956, 5, No 4, 321-330.

Abstract: No abstract.

Card 1/1

BARTFAI, Tamás; VERMES, Miklós

Potential calculation. Fiz szemle 12 no.9:289-290 S '62.

1. "Fizikai Szemle" szerkeszto bizottsagi tagja.

DI GLERIA, J.; BARTFAY, E.

Effect of treating seeds with biologically active micro-
elements on the crop yield. Agrochem talajtan 13 Suppl.:95-100
My '64.

1. Research Institute of Soil Science and Agricultural
Chemistry of the Hungarian Academy of Sciences, Budapest.

0035517

66. The influence of various nutrients on the quantity of fusel oil at alcoholic fermentation, by J. Haffay, A. Pek and F. Simek. ("Mezőgazdaság és Ipar" — Agriculture and Industry — Vol. IV, No. 2, pp. 25-29, Sept., 1950, 3 figs.)

In order to establish how the various albuminous substances influence the quantity of fusel oil produced, alcoholic fermentation experiments were made with yeast in nutrient solutions from molasses, respectively cane sugar. The addition of *leucin*, produced from cheap, raw materials (horn shavings, blood albumin) did not prove economical. Good results were obtained, however, when yeast mixed with water in a 1:1 proportion was subjected to autolysis in a thermostat for 48 hours at 48 C°, and when 0.1 to 2.0 per cent of the sterilized autolyzate was added to the mash. Under these conditions the time of fermentation was shortened by 30 to 40 per cent and the production of fusel oil increased by 0.8 per cent. On the basis of the laboratory results, factory experiments were made in the *Leipziger Alcohol Factory*, where the actual fusel oil yield increased by 25 per cent.

AS 5-55.4 METALLOGICAL LITERATURE CLASSIFICATION

068.533.61 631.851.78

74. Hydrolysis and fermentation of pentosans, by J. Bartlay and F. Smek. ("Ekelezési Ipar") *Food Industry* -- Vol. IV, No. 11, pp. 17-20, Nov. 1950, 1 (fig. 1 tab).

The husks of Hungarian sunflower seeds generally contain 20 per cent hemicellulose and 14 per cent of nonsugar components, which yield furfural when distilled with hydrochloric acid. When the hemicellulose portion was processed at a low temperature with thin sulphuric acid under pressure, about 10 to 18 per cent reducing sugar was obtained. This sugar can be best fermented with the use of the *Torula utilis minor* yeast strain, attaining a yield of 63 per cent. The cultivation of this yeast led to much better results when applying a sulphite lye medium instead of molasses. It was surprising to note the rapid adaptability of *Torula* to the sulphite lye medium, which was applied after a previous neutralization at 90 C° with milk of lime and after the removal of sulphuric dioxide by blowing through air.

BIOLOGICAL LITERATURE CLASSIFICATION

H

22/

CHAPTER 3

58. Report on the experiments for processing marc from grapes -- Beszámoló a szőlőtörköly felkészítéséről -- by J. Bartfay and A. Falc. (Food Industry -- Élelmiszeri Ipar -- Vol. V, No. 3, pp. 81-85, March 1951, 5 tabs.)

Samples of grape marc taken from four different regions of Hungary were found to contain 1.7 to 4.7 per cent alcohol and 1.4 to 6.15 per cent tartar. Experiments performed in a "Rapid" apparatus showed that frequent cloggings occur due to the accumulation of grape seeds. In laboratory tests the optimal temperature of alcohol extraction from marc ranged from 30° to 40° C. The alcohol yield can be increased by soaking the marc prior to lixiviation. Increasing the duration of lixiviation did not promote an appreciable rise in alcohol yield. In practice two processes may be applied: One consists in producing tartar by utilizing the "Rapid" apparatus, and in precipitating tartaric acid calcium from this solution, and the other in treating the marc in the diffusion apparatus and separating the tartar from the concentrated solution by cooling. A possibility also exists for the direct production of pure tartaric acid from run tartar without the formation of calcium tartrate by applying ion exchangers.

①

BARTFAY, J.

(3)

663.263

61. Results obtained by up-to-date methods of utilizing grape marc in experiments and in pilot plants - *Bevizsgáló a szőlőbőrnyelvi korszak fejlődésének újabb kísérleti és ipari eredményeiről* - J. Bartfay and V. Pelt. (Food Industry - *Élelmiszeri Ipar* - Vol. 7, 1953, No. 2, pp. 47-52, 3 figs., 6 tabs.)

Hungarian Technical Abst.
Vol. 6 No. 1
1954

✓ Experiments conducted in the laboratory of the Research Institute of the Fermentation Industry have proved the diffusion process to be the only up-to-date method for the utilization of grape marc. The diffusion is effected most advantageously at 80° C and at a 100 or 150% draw-off with a 20 min timing; 95% of the alcohol and 75% tartar contained in the marc can thus be extracted. Moreover edible oil can be obtained from the grape seeds discharged from the diffusion apparatus. A further advantage of the diffusion process is that the alcohol distillate bears a greater resemblance to brandy than to marc, this increases its value. J. B.

BARTAI, E.

Hungarian Technical Abst.
Vol. 6 No. 1
1954

57. The winning of rubber from Hungarian-grown *Taraxacum kok-saghyz* - *A hazai termesztésű kóksgyökér gumi készítése*. E. Bartai. (Journal of the Hungarian Chemical Society - *Magyar Kémikusok Lapja* - Vol. 8, 1953. No. 1, pp. 21-27, 2 figs., 3 tabs.)

Rubber was obtained from Hungarian-grown *Taraxacum kok-saghyz* either from the dried roots of two year old or from the roots of fresh one year old plants. The dried roots were pulverized in a hammer mill, hot water and steam were added simultaneously. After filtering, the ground roots were eluted with hot water until completely free of inulin and pectin. The steaming method was used for processing fresh roots, after which they were washed three times. 80 to 85% of the inulin content of fresh roots may be obtained in this way. An average of 3 to 3.5 l of alcohol and 0.8 to 1 kg of raw rubber may be gotten from 100 kg of fresh roots. Data on raw rubber and the trends and carcasses made from it are listed below.

	Trend	Carcass
Tensile strength, kg/mm ²	1.8-2.2	1.4-2.04
Max elongation, per cent	470-530	530-680
Elasticity	41-48	47-72
Shore hardness	65-68	50-59
Specific gravity	1.19	1.10

10-8-54
mf

BARTFAY, Jozsef, dr.; SZABABKAI, Gyula

Processing of artichokes in distilling industries. Elelm ipar
ll no.1:24-30 Mr '57.

1. Erjedesipari Kutatointezet is az Elelmszeripari Miniszterium
Muszaki Foosztalya.

BARTFAY, J.

"The economical use of sorghum sugar."

p. 231 (Elelmezesi Ipar) Vol. 11, no. 11/12, Dec. 1957
Budapest, Hungary

SO: Monthly Index of East European Accessions (EEAI) LC. Vol. 7, no. 4,
April 1958

BARTFAY, Jozsef, dr.

Determination of citric acid formed by fermentation.
Elelm ipar 13 no.8:256-257 Ag '59.

1. Erjedesipari Kutatointezet.

BARTFAY, Jozsef

Determination of fermentation citric acid. Magy kem lap 15 no.12:
566-567 D '60.

1. Erjedesipari Kutatointezet.

BARTFAY, Jozsef, Dr.

Determination of citric acid produced by fermentation. Elem
ipar 13 no.8:256-257 Ag '59.

1. Erjedesipari Kutatointezet.

BARTFAY, Jozsef, dr.; GAVALYA, Sandor

Preparation of pectin-decomposing products from *Aspergillus niger* mycelia. *Elelm ipar* 15 no.12:371-375 D '61.

1. Erjedesipari Kutatointezet.

BARTFAY, Jozsef; VARGA, Miklos

Quick determination of fermentation citric acid. Magy kem lap 17
no.9:430-432 S '62.

1. Erjedesipari Kutato Intezet.

BARTFAY, Tiborne

Study of the uptake of radioactive phosphorus through leaves on corn
(maize) plants. Agrokem talajtan 10 no.4:479-492 D '61.

1. Magyar Tudományos Akademia Talajtani es Agrokemiai Kutato Intezete,
Budapest.

DI GLERIA, Janos; BARTFAY, Tiborne

Growth development in tomato plants as affected by auxins and microelements. Agrokem talajtan 12 no.3:343-350 0 '63.

1. Magyar Tudomanyos Akademia Talajtani es Agrokemiai Kutato Intezete, Budapest. 2. "Agrokemia es Talajtan" szerkeszto bizottsagi tagja (for di Gleria).

EXCERPTA MEDICA Sec. 17 Vol. 3/6 Public Health June 57

1870. BARTH A. and KUDRNA J. Chem. Lab. ÚHES - Praha. *Orientační vázková metoda na stanovení par benzínu v ovzduší. A pilot gravimetric method for the determination of air-borne petrol fumes PRACOVNÍ LÉKARSTVÍ (Praha) 1956, 8/3 (195-198) Tables 1 illus. 3
The method by trapping in paraffin oils was modified and tested both in the laboratory and in the field. Strictly adhering to the prescription, this method is sufficiently exact for purposes of industrial hygiene.

BARTH, Alexandr; KUDRNA, Jan

Orientation gravimetric determination of benzine vapors in air.
Pracovni lek. 8 no.3:195-198 June 56.

1. Z chemicke laboratore UHES-Praha, reditelka MUDr. Vera Krasna,
odd. hygieny prace, prednosta MUDr. Alex. Grunwald.
(AIR POLLUTION,
petroleum fumes, gravimetric determ. (Cz))
(PETROLEUM PRODUCTS,
fumes in air, gravimetric determ. (Cz))

MANNINGER, R.; BARTHA, A.; JUHASZ, Magdalens; SZENT-IVANYI, T.

Studies on the etiology of virus diarrhea among cattle in Hungary. Acta veter Hung 13 no.4:407-410 '63.

1. Department for Bacteriology and Epidemiology of the University of Veterinary Sciences (Director:R.Manninger), Budapest. 2. Editorial board member, "Acta Veterinaria Academiae Scientiarum Hungaricae" (for Manninger).

BARTH, T.; JINDRA, A.; SIPAL, Z.

Study of the hydrolysis of some local anesthetics in liver
homogenates. II. Cesk. farm. 13 no.9:466-468 N : 64.

1. Katedra biochemie prirodovedecke fakulty Karlovy University,
Praha.

CZECHOSLOVAKIA

BARTH, V.

Chair of Mineralogy and Geology of the Palacky University
(Katedra mineralogie a geologie University Palackeho),
Olomouc

Prague, Casopis pro mineralogii a geologii, No 3, 1963,
pp 268-271

"Symposium on the Problem of Tufolav and Ignimbrite in
the USSR."

CZECHOSLOVAKIA

BARTH, V.

Prague, Casopis pro mineralogii a geologii, No 1, 1965, p
115

"On the Sixtieth Birthday of Professor of Roentgenology
Frantisek Nemeč."

BODA, F.; HEGEDUS, Z.; BARTHA, E.

Effect of sampling on the determination of the quality of
steel. Koh lap 9 no. 12: 536-540 D '54.

Bartha, E.

_____, SAVER KLASA

Country: Czechoslovakia

Academic Degrees: MD, university professor, osteonician

Affiliations:

Source: *Právo, Právník v Tuberkulóze a v Henochově Plišněch, No 4, Apr 61, pp 316-320*

Data: "National Conference on Osteoarticular Tuberculosis."

Speakers:

Bartha, E., university docent, MD.

Novák, J., chief physician (primar), MD.

Štěpán, J., chief physician, MD.

Štěpán, J., M.D.

4
7
670 0114)

BARTH, V.

Jan Krejci; a biographical sketch. p. 175

Vol. 5, no. 2, Feb. 1955
PRIRODNI Bedy VE SKOLE
Praha, Czechoslovakia

So: Eastern European Accession Vol. 5, No. 4, 1956

BARTH, V.

"Devonian pillow lavas in the surroundings of Sternberk and Moravsky Beroun."

p. 222 (Casopis Pro Mineralogii A Geologh. Vol. 2 no. 3, 1957, Czechoslovakia)

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

BARTH, V.

"Notes on the occurrence of Porphyroid in the western environs of Hermanice in the High Jeseniky Mountains."

VESTNIK, ustredni ustav geologicky, Prague, Czechoslovakia, Vol. 34, No. 3, 1959.

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

GABRIELOVA, MARIE /reviewer/; BARTH, V. /author/
SURNAME, Given Names

Country: Czechoslovakia

Academic Degrees: [not given]

Affiliation: [not given]

Source: Prague, Vestník Ustředního Ústavu Geologického, Vol XXXVI, No 2, 1961, pp 315-316.

Data: "Devon Vulcanism of the Sternberk-Horní Benesov Zone in Nizky Jeseník" (Devonský vulkanismus sternbersko-hornobenesovského pásma v Nizkem Jeseníku). Acta universitatis Palackianae Olomucensis, facultas rerum scientiarum I. Prague, State Publishing House of Pedagogical Literature (Státní pedagogické nakladatelství), 1960, 131 pages.

177

690 981643

SKACEL, Jaroslav; MAREK, Miloslav; MIKUS, Miloslav; KNEZ, Jaroslav;
PAUK, Tomas; BARTAS, Frantisek; OREL, Petr; VYBIRAL, Josef;
BARTH, Vojtech; KNETTING, Petr; FOJT, Bohuslav; DVORAK, Jaroslav;
KOCIAN, Jan

The 2nd Regional Geological Conference in Opava. Prir cas
slezsky 23 no.1:133-143 '62.

BARTH, Vojtech

Results of the Soviet symposium on tuffs and ignimbrites.
Gas min geol 8 no.3:268-271 JI '63.

1. Katedra mineralogie, Universita Palackeho, Olomouc.

KOJNOK, Janos, dr.; BARTHA, Adorjan, dr., az allatorvostudományok kandidátusa

Immunization experiments with Aujeszky's virus of attenuated virulence.
Magy allatorv lap 17:19-20 S '62.

1. Phylaxia Allami Oltoanyagtermelo Intezet, Budapest (for Kojnok).
2. Allatorvostudományi Foiskola Jarvanytani Tanszeke, Budapest (for Bartha).

BARTHA, A.; ALDASY, P.

Isolation of adenovirus strains from calves with virus diarrhoea. Acta veter Hung 14 no.3;239-245 '64.

1. Department of Epizootiology (Director: J.Meszaros), University of Veterinary Sciences, Budapest (for Bartha). 2. Director, Institute of Veterinary Hygiene, Miskolc (for Aldasy).

ALDASY, P.; CSOMTOS, L.; BARTHA, A.

Pneumo-enteritis in calves caused by adenoviruses. Acta veterin.
acad. sci. Hung. 15 no.2:167-175 '65

1. Veterinary Institute (Director: P. Aldasy), Miskolc; Central
Veterinary Institute (Director: T.Kadar), Budapest; Department
of Epizootiology (Head: J. Meszaros) of the University of
Veterinary Sciences, Budapest.