

GREGOROWICZ, Zbigniew; STOCH, Jerzy

Indirect mercurometric determination of sulfites. Chem  
anal 7 no.4:741-748 '62.

1. Department of Sanitary Chemistry, Politechnic, Gliwice,  
and Department of Analytical Chemistry, Normal School,  
Katowice.

GREGOROWICZ, Zbigniew, doc. dr. inż.; STOCH, Jerzy, mgr., st. asystent

Polish research on microelements. Wiad chem 16 no. 4:213-225 Apr 62.

1. Kierownik Katedry Chemii Sanitarnej, Politechnika Slaska, Gliwice, i Kierownik Zakladu Chemii Analitycznej, Wyzsza Szkola Pedagogiczna, Katowice (for Gregorowicz). 2. Zaklad Chemii Analitycznej, Wyzsza Szkola Pedagogiczna, Katowice (for Stoch).

GREGOROWICZ, Zbigniew, Dr.Ing. (Gliwice, Konarskiego 13/6, Poland); BUHL,  
Franciszek (Gliwice, Konarskiego 13/6, Poland)

New applications of redox indicators in the indirect analysis of  
anions. Acta ~~Chimica~~ Hung 32 no.2:145-149 '62.

1. Institut für Allgemeine Chemie der Schlesiſchen Technischen  
Hochschule, Gliwice, und der Analytischen Anstalt der Pedago-  
gischen Hochschule, Katowice, Poland.

BUHL, Franciszek; GIGONOWICZ, Zbigniew

Determination of traces of cupric ions with variamine blue.  
Chem anal & no.4:511-515 '63.

1. Department of Sanitary Chemistry, Polytechnic College,  
Gliwice, and department of Analytical Chemistry, Pedagogical  
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POLAND

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Department of Sanitary Chemistry, Politechnika Gliwice  
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Center, Polish Academy of Sciences, (Katedra Chemii  
Sanitarnej Politechniki Slaskiej, Gliwice. Zaklad Badan  
Naukowych Gornoslaskiego Okregu Przemyslowego Polskiej  
Akademii Nauk), Zabrze. (for III).

Warsaw, Chemia analityczna, No 5, September-October 1965,  
pp 889-894.

"Determination of fluorine in plant material."

POLAND

GREGOROWICZ, Zbigniew, doc. dr; KULICKA, Joanna, mgr inż; KARMIŃSKI, Władysław, dr inż.

1. Department of Sanitary Chemistry (Katedra Chemii Sanitarnej) (for Gregorowicz and Kulicka); 2. Department of Organic Technology (Katedra Technologii Chemicznej Organicznej) (for Karminski). Polytechnic, Sillesia, Gliwice (Politechniki Slaskiej, Gliwice) - (for all).

Warsaw, Chemia analityczna, No 6, November-December 1965, pp 1347-1351.

"Thin-layer chromatographic analysis of some pyridine derivatives."

GREGR, Jiri, MUDr.

Premature delivery in textile industry. Cesk. gyn. 22/36  
no.1-2:133-136 Feb 57.

1. Gyn. por. odd. OUNZ As. Prednosta prim. MUDr. Jiri Gregr.  
(DELIVERY, statist.  
premature in textile indust. (Cz))  
(INDUSTRIAL HYGIENE  
premature delivery in textile indust. (Cz))

GREGR, Vratislav

Chemie a technologie drozdarstvi. (Chemistry and Technology of the Yeast Industry; a university textbook. 1st ed. illus., bibl.) For the students of the Faculty of Food Technology. Prague, SNTL, 1957. 295 p.

Bibliograficky katalog, CSR, Ceske knihy, No. 36. 15 Oct 57. p. 789-90.



COUNTRY : CZECHOSLOVAKIA  
CATEGORY : Chemical Technology. Chemical Products and  
Their Applications. Fermentation Industry  
ABS. JOUR. : RZKhm., No. 23 1959, No. 83787  
AUTHOR : Gregr, V.; Dyr, J.  
INST. :  
TITLE : Improvements of the Technological Process of  
Lactic Acid Manufacture from Molasses  
ORIG. PUB. : Sb. Vysoke skoly chem.-technol. Prave. Odd.  
Fak. potravin. Technol., 1959, [1], 177-195  
ABSTRACT : Based on special studies on the improvement  
of mother culture preparation methods invol-  
ving lactic bacteria and on the establishment  
of optimum conditions of their nutrition, an  
accelerated method of conducting process on  
a commercial scale has been developed. It in-  
sures increase in the productivity of the fer-  
mentation department by 100% at the simulta-  
neous economy of malt sprouts, malt, autoly-  
sate, phosphates and sulfuric acid and impro-  
vement in quality of the lactic acid.

CARD: 1/1

H - 103

Gohar, Y.; Goto, J.; Kallvee, J.

Purification of waste water from the production of citric acid by sulfide fermentation. J. 235.  
(Dokl. Ak. N., no. 1, sept. 1987, Irkut, Sibirskoye Krai.)

3: Monthly list of East European recessions (GMI) 16, 17, 18, no. 10, Dec. 1987.  
Uncl.

COUNTRY:	: Czechoslovakia	80058
CATEGORY	: Chemical Technology. Chemical Products and Their Applications--Fermentation industry.	
ABS. JOUR.	: RZKhis., No.22 1959, No.	80058
AUTHOR	: Gregci, V.	
	: Prague Chemical Engineering School	
TITLE	: Increasing the Yield of Brewers Yeast. 1. Selection and Introduction of New Yeast Strains	
ORIG. PUB.	: Sb Vysoke Skoly Chem-Technol Praze Odd Fak Potravin Technol, 2, 267-314 (1958)	
ABSTRACT	: Laboratory and production tests on strain No 1 of <i>Saccharomyces cerevisiae</i> Hansen var <i>tropicus</i> have given 94.59% yields of pressed brewers yeast from molasses, corresponding to a yield of 47.34% of dry yeast solids on a sugar basis. From author's summary	
CARD:	1/1	

GREGR, V.; HAVLIKOVA, D.; STREJCHYR, V.

Ileofemoral thrombophlebitis in children. Cesk. pediat. 13 no.9:769-775  
5 Oct 58.

1. III. detska klinika KU, prednosta prof. Dr. O. Vychytil.  
(THROMBOPHLEBITIS, in inf. & child  
ileofemoral, case reports (Cz))  
(VEINS, FEMORAL, dis.  
ileofemoral thrombophlebitis in child., case reports (Cz))  
(ILEUM, blood supply  
same)

TESARIKOVA, L.; SUDA, M.; RICNY, D.; RUIZIKOVA, H.; KUBES, V.; JURKO, A.;  
GREGR, V.; BOUCHALOVA, M.

Reactivity of children with rheumatic fever during the course  
of the year. Fysiat. vestn. 43 no.2:83-91 Mr '65

I. II. detska klinika (prednosta - prof. dr. M. Toman), katedra  
zdravotnictvi (vedouci - prof. dr. A. Zacek) lekarske fakulty  
University J.E. Purkyne v Brne; Datske lecebny pro reumatiky a  
kardiaky v Bludove, Podebradch, Sliaci a Teplicech n.b.  
(vedouci - MUDr. V. Kubes, MUDr. V. Gregr; MUDr. J. Kozacek a  
MUDr. L. Tesarikova).

HOMOLKA, J.; GREGR, V., RIZUCKOVA, H.

Rheumatic fever in childhood with chronically increased biochemical activity as a special form of the course of the disease. Cesk. pediat. 20 no.9:775-780 S '65.

1. Detska lazenska lecebna chorob ustrojil obchovoho v lodebradech (vedouci MDr. V. Gregr) a Ustredni laborator fakultni polikliniky v Praze (vedouci prof. dr. J. Homolka, DrSc.).

BEŠIČKOVÁ, H.; GRŠGR, V.

Diacetyl-pyrocatechuic acid in the after-treatment of rheumatic fever. P:slat. vortn. 43 no.6:364-367 D ' 65.

1. Databa laser: aka lecobna ochorob ustrojil obelovoho, Podelrady.

GREGG, Vratislav, doc. inz. dr sc.

Problems and methods of treating sewage in the yeast industry.  
Przem ferment 1 rol 8 no.2:40-44 F '65.

1. Higher School of Chemical Technology, Prague.



GREGROVA, E.

[Effect of placenta praevia on premature labor] Placenta praevia  
a její vliv na předčasný porod. Cesk.gyn. 15 no.1-2:70-77 '50.  
(CLML 19:1)

1. Of the Third Obstetric-Gynecological Clinic of Charles University,  
Prague (Head -- Prof. Trapl, M.D.).

GREGROVA E.

Indications for caesarean section. *Cesk. gyn.* 15:4-5 1950.  
p. 365-74

1. Of the Third Gynecological and Obstetrical Clinic (Head --  
Prof. Jiri Trapl, M. D.), Charles University, Prague.

*CLM* 19, 5, Nov. 1950

GREGROVA, E.

Infant mortality in breech presentation delivered by the Bracht's  
method. Cesk.gyn. 15 no.11:792-802 1950. (CIML 20:6)

1. Of the Third Obstetric-Gynecological Clinic (Head--Prof. Trapl,  
M.D.), Charles University in Prague.

GREGROVA, Emanuela; SEBEK, Tibor

Effect of diathermic-coagulation of the cervix uteri on bacterial picture of the vagina. Cesk. gyn. 25[39] no.1/2:122-124 Mr'60.

1. II. gyn.-pat. klinika KU, prednosta prof. MUDr. J. Lukas, Dr. Sc.  
(ELECTROCOAGULATION)  
(CERVIX UTERI surg.)  
(VAGINA microbiol.)

PRAZIC, M.; SALAJ, B.; SUBOTIC, R.; GREGURIC, M.

Audiologic analysis of conditions in a textile mill. Arh.  
hig. rada. 14:207-221 '63.

1. Audioloski centar Otorinolaringoloske klinike Medicinskog  
fakuleta u Zagrebu.

GREGULA, Pavol, promovany geolog

Geological interpretation of the results of geophysical measurements in the Mnisek nad Hnilcom area. Geol pruzkum 7 no.2:39-42 F '65.

1. Geologicky prieskum National Enterprise, Zilina, Branch Enterprise in Spisska Nova Ves.

PRAZIC, Mihajlo, dr.; GREGURIC, Miroslav, ing.; SALAJ, Boris, dr.;  
SUBOTIC, Radovan, dr.

Individual protection against damaging effect of industrial  
noise. Liječn. vjesn. 87 no.4:409-418 Ap '65.

GREGUS, C.

"A contribution to the solution of the problem of mapping a complex forestry project."

p. 116 (Les) Vol. 12, no. 3, Mar. 1956  
Prague, Czechoslovakia

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



GREG'S, C.

"Methods of control in our forestry."

p. 344 (Les) Vol. 12, no. 7/8, July/Aug. 1956  
Prague, Czechoslovakia

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

GREGUS, C.

The graphic and mathematical methods of evaluating aerial photographs by Professor Visnovsky. p. 244.

LESNICKY CASOPIS. (Slovenska akademia vied) Bratislava, Czechoslovakia,  
Vol. 5, no. 3/4, 1959.

Monthly List of East European Accessions (EEAI), LC, Vol. 8, no. 11, Nov. 1959  
Uncl.

GREGUS, Ctibor

Yield index of an undergrowth forest derived from  
rejuvenation periods. Les cas 8 no.2:103-114 '62.

1. Ustav pre hospodarsku upravu lesov, Zilina.

GREGUS, Ctibor, inz.

Proposal of a cutting plan in shelterwood forests. Les cas  
9 no.4/5:475-477 '63.

1. Ustav pre hospodarsku upravu lesov, Zilina.

GREGUS, J.

"Progress in the Mechanization and Increase of Productivity in the Vineyards of Slovakia."  
p. 965 (ZA SOCIALISTICKE ZEMEDELSTVI, Vol. 3, No. 9, Sept. 1953) Praha, Czechoslovakia

SO: Monthly List of East European Accessions, Library of Congress, Vol. 3, No. 4,  
April 1954. Unclassified.

GREGUS, Julius, MUDr.

Fight of health service against accidents. Pracovni lek.  
7 no.3:171-172 May 55.

1. Kraj. poist. lekar SOR, Spiska Nova Ves.  
(ACCIDENTS, prevention and control  
in indust., role of health serv.)  
(INDUSTRIAL HYGIENE  
accid. prev., role of health serv.)

GREGUS, M.

"A contribution to the organization of preparatory and outside work in the complex forest management."

p. 342 (Les) Vol. 12, no. 7/8, July/Aug. 1956  
Prague, Czechoslovakia

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

~~MICHAŁ~~, GREGUS, M.

On Some Connections Among Integrals of Reciprocally "Adjungierten" Linear Differential Equations of the Third Order and on a Boundary Value Problem

Greguš Michal. Über einige Zusammenhänge zwischen der Integralen der gegenseitig adjungierten linearen Differentialgleichungen der dritten Ordnung und über ein Randwertproblem. Acta Fac. Nat. Univ. Comenian. Math. 1 (1956), 265-272. (Slovak. Russian and German summaries)

2  
1-FW.



PLANS, A.

"Application of Dispersion to Second-Order Cornering Problems." p. 27,  
(MATEMATICKO-FYZIKALNY CASOPIS, Vol. 4, No. 1, 1954, Bratislava, Czechoslovakia)

SO: Monthly List of East European Accessions, (HEAL), LC, Vol. 4  
No. 5, May 1955, Uncl.

GREGUS, MICHAL

Greguš, Michal. On some properties of the solutions of a homogeneous linear differential equation of the third order. Mat.-Fyz. Casopis. Slovensk. Akad. Vied 5 (1955), 73-85. (Slovak, Russian summary)

*Matt*

The author shows first that the integrals of the equation  $y''' + 2A(x)y' + [A'(x) + b(x)]y = 0$  for which  $y(a) = 0$  are the solutions of a certain linear differential equation of second order; similarly for those integrals for which  $y'(a) = 0$  or  $y''(a) = 0$ . For these classes of integrals certain results are proved, in particular the following theorem: If  $A = A(x, \lambda) > 0$ ,  $A' = \partial A(x, \lambda) / \partial x$ ,  $b = b(x, \lambda) > 0$  are continuous in  $-\infty < x < \infty$ ,  $\Lambda_1 < \lambda < \Lambda_2$ , and  $A$  is increasing in  $\lambda$ ,  $A(x, \lambda) \rightarrow \infty$  as  $\lambda \rightarrow \Lambda_2$ , and  $a < b < c$ , then the above equation has infinitely many solutions  $y_n, y_{n+1}, \dots, y_{n+p}, \dots$ ,  $y_{n+p}(a) = y_{n+p}(b) = y_{n+p}(c) = 0$ , belonging to the parameter values  $\lambda_n, \lambda_{n+1}, \dots, \lambda_{n+p}, \dots$  which converge to  $\Lambda_2$ . The solution  $y_{n+p}$  has exactly  $n+p$  zeros in  $(b, c)$ .

M. Golomb (Lafayette, Ind.)

Gregus, M.

Some new aspects of solving the differential equation  $y''' + Qy' + Q'y=0$ . p. 237.

Bratislava. Univerzita. Prirodovedecka fakulta. SPISY Brno, Czechoslovakia.  
No. 365, 1955.

Monthly List of East European Accessions, (EFAI) LC, Vol. 8, no. 10, 1959. -Oct.  
Uncl.

The Differential Equation of the Third Order  $y''' + 2Ay' + (A'+b)y = 0$  With All Oscillatory Solutions

Greguš, M. Die Differentialgleichung der dritten Ordnung  $y''' + 2Ay' + (A'+b)y = 0$ , mit allen oszillatorischen Lösungen. Acta Fac. Nat. Univ. Comenian. Math. 1 (1956), 41-47. (Czech. Russian and German summaries)

In dieser Arbeit wird das Problem gelöst, unter welchen Bedingungen jede Lösung der Differentialgleichung

$$y''' + 2Ay' + (A'+b)y = 0$$

im Interval  $(-\infty, \infty)$  unendlich viele Nullstellen hat.

*Aus der Zusammenfassung des Autors*

2  
1-FIW

Greguš, Michal. Über einige neue Randwertprobleme einer Differentialgleichung dritter Ordnung. Czechoslovak Math. J. 7(82) (1957), 41-47. (Russian. German summary)

Der Verfasser beschäftigt sich mit den Eigenwertaufgaben bei der Differentialgleichung  $y''' + A(x,\lambda)y' + [A'(x,\lambda) + b(x,\lambda)]y = 0$ . Er betrachtet fünf Typen von Randbedingungen: (1)  $y(a) = y'(a) = y(b) = 0$ ; (2)  $y(a) = y'(a) = y'(b) = 0$ ; (3)  $y(a) = y(b) = y'(c) = 0$ ; (4)  $y(a) = y'(b) = y(c) = 0$ ; (5)  $y(a) = y'(b) = y'(c) = 0$ , wo  $a < b < c$ . Unter gewissen Bedingungen über die Koeffizienten  $A(x,\lambda)$  und  $b(x,\lambda)$  beweist er mit Hilfe eines Oszillationssatzes von Sansone [Univ. Nac. Tucumán. Rev. A. 6 (1948), 195-253; MR 10, 300] die Existenz unendlich vieler reeller Eigenwerte und charakterisiert die zugehörigen Eigenfunktionen durch die Anzahl ihrer Nullstellen im Intervall  $\langle a, b \rangle$ , bzw.  $\langle b, c \rangle$ . M. Zlámal (Brno)

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On Certain New Boundary Value Problems, of a Third Order Differential Equation

16

On the Linear Differential Equation of the Third Order With Constant Coefficients

Greguš, M. Über die lineare Differentialgleichung der dritten Ordnung mit konstanten Koeffizienten. Acta Fac. Nat. Univ. Comenian. Math. 2 (1957), 61-66. (Slovak. Russian and German summaries)

2  
1-F1W

In dieser Arbeit behandelt man einige Eigenschaften der Lösungen der linearen Differentialgleichung dritter Ordnung mit konstanten Koeffizienten der Form:

(a)  $y''' + 2Ay' + \Omega y = 0$

und die Eigenschaften der Lösungen der zu ihr adjungierten:

(b)  $z''' + 2Az' - \Omega z = 0,$

dabei sind  $A > 0, \Omega > 0$  Konstanten.

Im zweiten Teil wird die Existenz der Eigenwerten für die Differentialgleichung (a) und für die Randwertaufgabe

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$y(x_0 - d, \lambda) = y(x_0, \lambda) = y''(x_0, \lambda) = 0$

durchgeführt, wo  $x_0 \in (-\infty, \infty), d > 0$  konstante Zahlen sind. Dabei  $A = A(\lambda), \Omega = \Omega(\lambda)$  bedeuten für  $\lambda \in (\Lambda_1, \Lambda_2)$  stetige Funktionen mit bestimmten Eigenschaften.

Zusammenfassung des Autors:

The Homogeneous Boundary Value Problem for the Solution of a Linear Differential Equation of the Third Order

Greguš, M. Das homogene Randwertproblem für die Lösungen einer linearen Differentialgleichung dritter Ordnung. Acta Fac. Nat. Univ. Comenian. Math. 2 (1958), 219-228. (Slovak. Russian and German summaries)

2  
1-F1W

In der Arbeit sind zwei Randwertprobleme für die Lösungen der Differentialgleichung

$$y''' + 2A(x, \lambda)y' + [A'(x, \lambda) + b(x, \lambda)]y = 0$$

gelöst.

*Aus der Zusammenfassung des Autors*

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37587  
S/044/62/000/004/023/099  
C111/C444

AUTHOR: Gregus, M.

TITLE: Homogeneous boundary value problems for a linear differential equation of third order

PERIODICAL: Referativnyy zhurnal, Matematika, no. 4, 1962, 33, 34, abstract 4B151. (Acta Fac. rerum natur. Univ. Comenianae Math., 1958, 2, no. 5 - 6, 219 - 228)

TEXT: One solves boundary value problems for the differential equation

$$y''' + 2A(x, \lambda)y' + [A'(x, \lambda) + b(x, \lambda)]y = 0 \quad (1)$$

I. One supposes that  $A(x, \lambda) > 0$ ,  $\frac{\partial A(x, \lambda)}{\partial x}$  and  $b(x, \lambda) \geq 0$  are continuous with respect to  $x \in (-\infty, \infty)$  and  $\lambda \in (\Lambda_1, \Lambda_2)$ .

For (1) the boundary value problem

$$y(a, \lambda) = 0,$$

$$\alpha_1(\lambda)y(b, \lambda) - \alpha(\lambda)y'(b, \lambda) = 0,$$

$$\beta_1(\lambda)y(c, \lambda) - \beta(\lambda)y'(c, \lambda) = 0.$$

Card 1/2



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C111/C444

Homogeneous boundary value problems...

is solved.

II. One supposes that  $A(x, \lambda)$  increases in  $\lambda \in (\Lambda_1, \Lambda_2)$ ;

$\lim_{\Lambda \rightarrow \Lambda_2} A(x, \lambda) = +\infty$  for every  $x \in (-\infty, \infty)$ ;  $b(x, \lambda) \neq 0$  for every sub-

interval for  $x \in (-\infty, \infty)$ .

For (1) the boundary value problem

$$A_1(\lambda)y(a, \lambda) + A_2(\lambda)y'(a, \lambda) + A_3(\lambda)y''(a, \lambda) = 0,$$

$$B_1(\lambda)y(b, \lambda) + B_2(\lambda)y'(b, \lambda) + B_3(\lambda)y''(b, \lambda) = 0,$$

$$C_1(\lambda)y(c, \lambda) + C_2(\lambda)y'(c, \lambda) + C_3(\lambda)y''(c, \lambda) = 0,$$

is solved, where  $a < b < c$ . The solution follows by aid of the oscillation theorem of Sansone, G. (Revista math. y fis. teorica; 1948, Ser. A., Tuckman. 195), and it relies on the properties of the family of the solutions of the equation (1) (RZhMat; 1956, 5227).

[Abstracter's note: Complete translation.]

Card 2/2

10-400

3/044/62/000/005/015/072  
C111/C333

AUTHOR: Gregus, M.  
 TITLE: On some properties of the solutions of the third order linear differential equation  
 PERIODICAL: Referativnyy zhurnal, Matematika, no. 5, 1962, 53, abstract 5B247. ("2ème Congr. math. hongrois, Budapest, 1960". Budapest, 1961, IIIIa/57-59)  
 TEXT: The differential equation

JB

$$y''' + 2Ay' + (A' + B)y = 0 \quad (1)$$

is considered. A number of theorems on the oscillation properties of the solutions and on the boundary value problems for (1) are formulated with-out proofs. If  $A(x) \leq 0$ ,  $A' \geq 0$ ,  $b \geq 0$ , then every solution of (1) has at least two zeros on  $(-\infty, \infty)$ . For the case where the coefficients of (1) depend on a parameter  $\lambda$ , the author gives a condition for the existence of enumerably many  $\lambda$  values for which the problem  $y(a) = y(b) = y(c) = 0$  has a non-trivial solution.

[Abstracter's note: Complete translation.]

Card 1/1

GREGUS, M.

On some properties of the solutions of a differential equation of the third order. Acta r nat Univ Com 7 no.11:585-595 '63.

1. Katedra matematiky prirodovedeckej fakulty, Univerzita Komenskeho, Bratislava, Smeralova 2.

GREGUS, M.

Remarks on insoluble boundary problem of the third order.  
Acta r nat Univ Com 7 no.12:639-647 '63.

1. Katedra matematiky, Univerzita Komenskeho, Bratislava,  
Smeralova 2.

GREGUS, M., doc. dr. CSc.

On the boundary value problem of the  $n$ th order in  $m$  points. Acta  
r nat Univ Com 9 no.11:49-55 '64.

1. Chair of Mathematical Analysis of the Faculty of Natural Sciences  
of Comenius University, Bratislava, Smeralova 2/a.

OREGUS, Michal

On the generalized boundary problems of the  $n^{\text{th}}$  order. Cas pro  
pest mat 89 no.1:85-89 F '64.

1. J.A Comenius University, Bratislava, Smeralova 2. Submitted  
November 10, 1962.

86352

S/046/60/006/004/001/022

B019/B056

24.1800

AUTHORS: Gregush, A., Gregush, P.

TITLE: The Effect of Ultrasonics Upon the Catalytic Properties of MnO<sub>2</sub> Gels and Suspensions

PERIODICAL: Akusticheskiy zhurnal, 1960, Vol. 6, No. 4, pp. 441 - 445

TEXT: In the experiments carried out here, the authors used a barium titanate emitter, which operated with a natural frequency of 875 kc/sec. The intensity in the focus was about 150 watt/cm<sup>2</sup>. An investigation was made of the effect of MnO<sub>2</sub> suspensions and gels upon the decay of H<sub>2</sub>O<sub>2</sub> in an irradiation with an intense ultrasonics. The MnO<sub>2</sub> concentration was such that exactly 50 cm<sup>3</sup> of oxygen were formed from 20 cm<sup>3</sup> H<sub>2</sub>O<sub>2</sub> at 25°C. The decay rate of H<sub>2</sub>O<sub>2</sub> was measured by means of an experimental system consisting of a piston with the catalyst, a water tank, a H<sub>2</sub>O<sub>2</sub> container, a mixing motor, a mixer with a mercury seal, a gas burette, and a thermostat.

Card 1/3

The Effect of Ultrasonics Upon the Catalytic Properties of  $MnO_2$  Gels and Suspensions

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From the results obtained the authors recognized that in ultrasonic irradiation, the decay of  $H_2O_2$  is more intense initially than without irradiation, but this intensity becomes weaker later, and the decay of the entire  $H_2O_2$  in all cases takes the same time. It further follows from the results obtained that the decay rate has an upper limit, which is caused either by specific sound-induced chemical reactions or which is a colloidal effect. If  $\Delta V$  is understood to stand for the difference between the oxygen volume formed under the effect of ultrasonics and the oxygen volume formed without ultrasonics, the experimental data for the suspension may be well described by  $\Delta V = A_1 t^{b_1} e^{-0.233t}$  and for gel by  $\Delta V = A_2 t^{b_2} e^{-0.533t}$ . The course taken by these curves has considerable similarity with that of adsorption curves. As further concluded by the authors, the change in the catalyst effect of the  $MnO_2$  gels and suspensions is due to a coagulating effect of ultrasonics. The authors thank Professor A. Buzagh for raising the problem and Docent Volfram for his assistance. There are 7 figures and 4 references: 2 Soviet, 1 Hungarian, and 1 German. X

Card 2/3



The Effect of Ultrasonics Upon the Catalytic Properties of  $MnO_2$  Gels and Suspensions

86392

S/046/60/006/004/001/022

B019/B056

ASSOCIATION: Laboratoriya ul'trazvuka Instituta zh.-d. transporta  
Budapesti (Laboratory of Ultrasonics of the Institute of Rail-  
road Engineers, Budapest)

SUBMITTED: February 10, 1960

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Card 3/3

GREGUSH, P. (Vengerskaya Narodnaya Respublika)

Silicified tree trunk from the lower Eocene of the Volga  
Basin. Paleont.zhur. no.3:134-137 '59.

(MIRA 13:4)

(Volga Valley--Sequoia, Fossil)

GREGUSH, P. [Greguss, Pal]; FILIN, V.R.[translator]; CHISTYAKOVA,  
O.N.[translator]; DANIL'CHENKO, O.P., red.; MUKHINA, L.V.,  
tekhn. red.

[A guide to the wood analysis of gymnosperms based on  
microscopic data] Opredelitel' drevesiny golosemennykh  
po mikroskopicheskim priznakam. Moskva, Izd-vo Mosk.  
univ. 1963. 183 p. Translated from (MIRA 16:11)  
the Hungarian.

(Wood--Anatomy)      (Gymnosperms)

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Electrophoresis of a calf thymus histone, labeled with radioiodine,  
in vitro in buffers containing urea. Biologia 15 no.10:776-779  
'60. (EEAI 10:5)

1. Vyzkumny ustav onkologicky, Bratislava.

. (ELECTROPHORESIS) (THYMUS GLAND) (UREA) (HISTONES)  
(RADIOISOTOPES) (IODINE) (BUFFER SUBSTANCES)

HNILICA, L.; GREGUSOVA, V.; THURZO, V.

Effect of urea on the separation of histone from the thymus gland of a calf by electrophoresis. Coll Cz Chem 25 no.11:2765-2769 N '60.  
(EEAI 10:6)

1. Onkologisches Forschungsinstitut, Bratislava.  
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(Electrophoresis)

HUPKA, S.; GREGUSOVA, V.; THURZO, V.

The interaction of calf thymus histone with native plasma as followed  
in vitro and in vivo in rabbits, Neoplasma 8 no.6:561-566 '61.

1. Institute of Oncological Research, Bratislava.

(BLOOD PROTEINS chem) (THYMUS GLAND extracts)  
(HISTONES chem)

GREGUSOVA, V.; HUPKA, S.

On the distribution of Cr<sup>51</sup>-labelled bone marrow cells in irradiated rats. Neoplasma 8 no.6:577-582 '61.

1. Oncological Research Institute, Bratislava, Czechoslovakia.

(RADIATION INJURY exper) (BONE MARROW)  
(CHROMIUM radioactive)

HUPKA, S.; SIMKO, S.; GREGUSOVA, V.; SKUPENOVA, A.; THURZO, V.

The protection by bone marrow homografts of rabbits irradiated by gamma-rays from Co<sup>60</sup>. Neoplasma 8 no.6:587-591 '61.

1. Oncological Research Institute, Bratislava, Czechoslovakia.

(BONE MARROW transpl) (RADIATION INJURY exper)  
(COBALT radioactive)

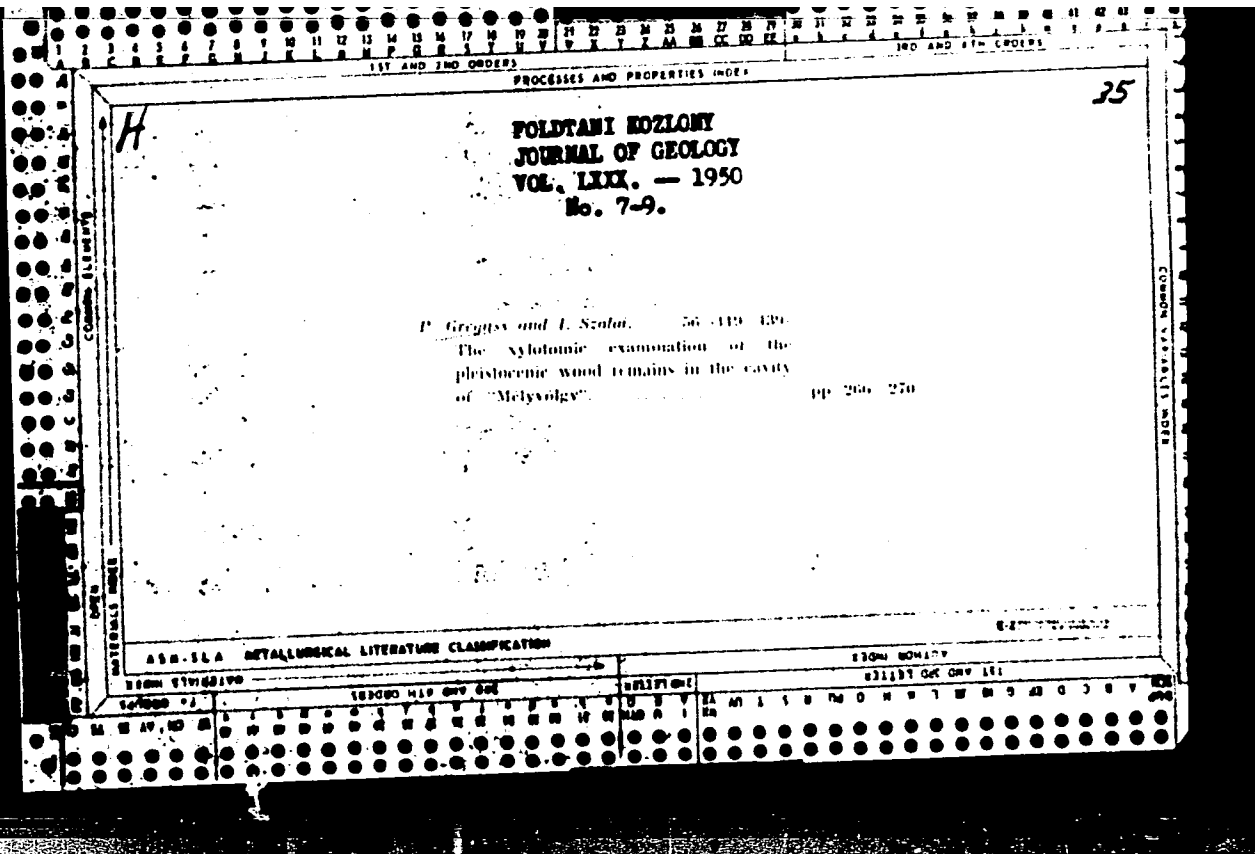


GREGUSOVA, V.; HUPKA, S.

Determination of the erythrocyte volume and total blood volume with radioactive chromium. Bratisl. lek. listy 41 no.8:481-485 '61.

I. Z Vyskumneho ustavu onkologickeho v Bratislave, riaditel clen koresp. SAV V. Thurzo.

(CHROMIUM radioactive) (ERYTHROCYTE COUNT)  
(BLOOD VOLUME)



GREGUSS, M.

The key to identification of Pinus Arten based on xylotomy. In German with Russian summary. illus., plates, bibl., table. (Xylotomischer Bestimmungsschlüssel der Pinus Arten (von) F. Greguss (und) I. Varga. 162 p. 1950 Szeged)  
GTY

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Xylotomic determination of Taxodiaceae. In German. p. 407. Vol 2, 1952 (published in 1954) A MAGYAR TUDOMÁNYEGYETEMEK BIOLÓGIAI INTÉZETÉNEK ÉVEKÖNYVE. SEEGEDI RESZ. Budapest, Hungary.

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

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p. 91, (FOLDTANISZLOI NY. BULLETIN OF THE HUNGARIAN GEOLOGICAL  
SOCIETY, Budapest, Hungary). Vol. 84, No. 1/2, Jan./June 1954.

SO: Monthly List of East European Accessions, (EEA), 10, Vol. 4,  
No. 5, May 1955, Incl.

GREGUSS, PAL.

Identification of living gymnosperms on the basis of xylotomy. (Translation from the Hungarian by Mrs. L. Jocski) Budapest, Akademiai Kiado, 1955. 263 p. (In English. illus., bibl., index, tables (in pocket))

GREGUSS, P.

Identifying a lower Miocene wood trunk found in Turow on the bank of the Neisse River. p. 273.

ACTA GEOLOGICA POLONICA, Warszawa, Vol. 5, no. 2, 1955.

SO: Monthly List of East European Accessions, (EEAL), IC, Vol. 4, no. 10, Oct. 1955,  
Uncl.

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The phyllotaxy of Metasequoia, Sequoia, and Taxodium. In English. p. 29.  
(ACTA BIOLOGICA. Vol. 2, no. 1/4, Dec. 1956, Hungary)

SO: Monthly List of East European Accessions (EEAL) LC. Vol. 6, no. 12, Dec. 1957.  
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Plant remains of the Cretaceous period from Tata. In German. p. 39.  
(ACTA BIOLOGICA. Vol. 2, no. 1/4, Dec. 1956, Hungary)

SO: Monthly List of East European Accessions (EEAL) LC. Vol. 6, no. 12, Dec. 1957.  
Uncl.

OPENGUSS, F.

"The leaf epidermis of the Cycadales." In English. p. 151.

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Uncla.

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"Investigation of wood remnants brought to surface by drillings at Tiszalok." In German. p. 165.

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ACTA BIOLOGICA. Szeged, Hungary, Vol. 3, No. 3/4, 1957.

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The causes of longitudinal cracks on beech logs which can be peeled. p. 3.  
(Az Erdo, Vol. 6, No. 1, Jan 1957, Budapest, Hungary)

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GREGUSS, P.

A new Laurinoxylon species from Hungary.

P. 218, (Foldtani Kozlony) Vol. 87, no. 2, Apr./June 1957, Budapest, Hungary

SO: Monthly Index of East European Acessions (EEAI) Vol. 6, No. 11 November 1957

GREGUSS, PAL.

Holzanatomie der europäischen Laubholzer und Straucher. (Xylotomy of European dicotyledonous trees and shrubs. 2d ed. In German. bibl., index, tables (6 fold. in pocket)

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Uncl.

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Histological investigation of tree. p. 257

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GREGUSS, Pal, dr., egyetemi tanar (Szeged)

An account of the 9th International Congress of Botany. Magyar Tudomány 67 no.2:99-102 F '60.

1. Director, Institutum Botanicum Universitatis, Szeged, Hungary,  
(International Congress of Botany, 9th, Montreal, 1959)  
(Hungarians in Canada) (Botany)



GREGUSS, Pal, (Jr.)

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GREGUSS, Pal, dr.

Ultrasonic waves : a new aid to archaeology. Elet tud 16 no.46:1467-  
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Critical remarks about the applicability of ultrasonic waves in the chemical industry. Magy kem lap 17 no.11:494-505 N '62.

1. Vasuti Tudomanyos Kutato Intezet.

GREGUSS, Pal, dr. (Jr)

Microbionomics. Elet tud 17 no.44:1387-1389 4 N '62.

LIGETI, Gyorgy; GREGUSS, Pal, dr. (Jr)

Limits of the technological expediency. Musz elet 19  
no.25:11 3 D '64.

1. Head, Ultrasonic Laboratory, Railroad Scientific Research  
Institute, Hungarian State Railways, Budapest (for Greguss).

GREGUSS, Pal, dr.

Application of ultrasonic waves in some institutes in Moscow.  
Technika 9 no.4:3 Ap '65.

GREGUSS, Pal, dr.

Relationships of Cycadales on the basis of their xylotomy.  
Acta bot Hung 10 no.1/2:127-144 '62.

1. Institute of Botany Attila Jozsef University, Szeged.  
Submitted March 8, 1962.



GREGUSS, P. JR.

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33. The recovery of cement dust from kiln chimneys by acoustic means -- Szallo cementpor visszanyerese akusztikus uton -- by T. Tarnoczy and P. Greguss Jr. (Hungarian Engineering -- Magyar Technika -- No. 5, pp. 21--25, May 1951, 4 figs, 1 tab.)

Large quantities of clinker dust are carried away through the chimneys of drying of kilns in cement manufacturing works. This dust not only jeopardizes the health of factory workers and the population of the area, it also endangers buildings by settling on roofs and, moreover means a substantial loss in clinker dust. To a certain extent heat losses also must be taken into account, since the hot air, if freed from dust, can be utilized in production. Unsuccessful experiments had been made to recover the dust by electrostatic methods, however, a supersonic process, devised by Brandt, Freund and Hiedemann in 1936, had proved more successful. By this process, cigarette smoke and oil vapours were subjected to mechanical vibrations generated by a magnetostriction-type ultrasonic generator which resulted in orthokinetic coagulation. On the basis of several other experiments, dealt with in detail, the daily amount of 6 tons of deposited dust could be raised threefold, i.e. to approx. 18 tons at the Tatabanya Cement Works by applying a Hartmann gas flow generator into the chimneys at several angles. The acoustic efficiency of this generator was

(over)

T. TARNOCZY

6.8 per cent and achieved the above results with advancing waves of 0.12 W per sq. cm intensity. The article describes the experiments and computations and also give comprehensive tables of the results.

GREGUSS, P., JR.

Possibility of using acoustical energy in civil engineering. p. 183.  
Inspection of civil engineering works during their execution. p. 189.

Vol. 4, no. 9, Sept. 1954.

MELYEPTTESTUDOMANYI SZEMLE

Budapest

SOURCE: Monthly list of East European Accession, (EFAL), LC, Vol. 5,  
No. 3, March, 1956

GREGUSS, F., JR.

"Obtaining caffeine from coffee by acoustical extraction." *Elelmezesi Ipar*, Budapest, Vol. 8, No. 4, Apr. 1954, p. 114.

SO: Eastern European Accessions List, Vol. 3, No. 11, Nov. 1954, L.C.

GREGUSS, F., JR.

GREGUSS, P, JR.  
Use of supersonics in the leather industry. p. 75

Vol. 5, No. 4, August, 1955 Budapest, Hungary FOR-ES CIPOTECHNKA

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 5  
No. 3, March, 1956

Hungary/Acoustics - Ultrasonics, J-4

Abst Journal: Referat Zhur - Fizika, No 12, 1956, 35581

Author: Greguss, Pal

Institution: None

Title: Demonstration of the Use of Ultrasonics in Industry at the Leipzig Fair

Original

Periodical: Meres es automat., 1956, 4, No 5, 152-154

Abstract: None

Card 1/1

CPA 000, 00

Category: Poland

B-10

Abs Jour: Zh--Kh, No 3, 1957, 7632

Author : Greguss, P., Jr.

Inst : Not given

Title : Dehydrogenation and Cyclization of Paraffin Compounds Under  
the Action of Sound Waves

Orig Pub: Przem. Chem., 1956, Vol 12, No 4, 226-229 (published in Polish  
with summaries in Russian and English)

Abstract: The effect of sound waves on the dehydrogenation and cyclization  
of paraffin compounds has been established (spectroscopic and  
electron microscopic investigation, determination of octane num-  
ber). The sound waves apparently act on the layer adjoining the  
wall of the reactor. The mechanism of the reaction depends on  
the physical and chemical properties of the reactor walls.

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GREGUSS, P.

Dehydrocyclization by acoustic waves. P. Gréuss, Jr.  
 (Central Inst. Phys. Research, Budapest, Hung.). *Phys. Chem.* 35, 226-9 (1966).—Paraffins were refluxed in an app. that had a source of acoustic waves at the end of the reflux condenser. This treatment led to a simultaneous dehydrogenation and cyclization of the paraffins, as could be found by investigating the final products spectroscopically, electron-microscopically, and by a detn. of their octane values. It is assumed that the reactions observed actually take place anyhow at the walls of the vessel, which catalyze them; the acoustic waves act upon the boundary layers, thus furnishing more energy, and the catalytic processes may occur more easily. On changing the reactor material for one that has other chem. and phys. properties, the final products obtained from the same paraffin, are quite different.  
 Werner Jacobson

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AUTHORS: Gregush, A., Gregush, P.

TITLE: The Effect of Ultrasonics Upon the Catalytic Properties of  
MnO<sub>2</sub> Gels and Suspensions

PERIODICAL: Akusticheskiy zhurnal, 1960, Vol. 6, No. 4, pp. 441 - 445

TEXT: In the experiments carried out here, the authors used a barium titanate emitter, which operated with a natural frequency of 875 kc/sec. The intensity in the focus was about 150 watt/cm<sup>2</sup>. An investigation was made of the effect of MnO<sub>2</sub> suspensions and gels upon the decay of H<sub>2</sub>O<sub>2</sub> in an irradiation with an intense ultrasonics. The MnO<sub>2</sub> concentration was such that exactly 50 cm<sup>3</sup> of oxygen were formed from 20 cm<sup>3</sup> H<sub>2</sub>O<sub>2</sub> at 25°C. The decay rate of H<sub>2</sub>O<sub>2</sub> was measured by means of an experimental system consisting of a piston with the catalyst, a water tank, a H<sub>2</sub>O<sub>2</sub> container, a mixing motor, a mixer with a mercury seal, a gas burette, and a thermostat. X

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The Effect of Ultrasonics Upon the Catalytic  
Properties of  $MnO_2$  Gels and Suspensions

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From the results obtained the authors recognized that in ultrasonic irradiation, the decay of  $H_2O_2$  is more intense initially than without irradiation, but this intensity becomes weaker later, and the decay of the entire  $H_2O_2$  in all cases takes the same time. It further follows from the results obtained that the decay rate has an upper limit, which is caused either by specific sound-induced chemical reactions or which is a colloidal effect. If  $\Delta V$  is understood to stand for the difference between the oxygen volume formed under the effect of ultrasonics and the oxygen volume formed without ultrasonics, the experimental data for the suspension may be well described by  $\Delta V = A_1 t^{b_1} e^{-0.233t}$  and for gel by  $\Delta V = A_2 t^{b_2} e^{-0.533t}$ . The course taken by these curves has considerable similarity with that of adsorption curves. As further concluded by the authors, the change in the catalyst effect of the  $MnO_2$  gels and suspensions is due to a coagulating effect of ultrasonics. The authors thank Professor A. Buzagh for raising the problem and Docent Volfram for his assistance. There are 7 figures and 4 references: 2 Soviet, 1 Hungarian, and 1 German.

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The Effect of Ultrasonics Upon the Catalytic Properties of  $MnO_2$  Gels and Suspensions S/046/60/006/004/001/022  
B019/B056

ASSOCIATION: Laboratoriya ul'trazvuka Instituta zh.-d. transporta  
Budapest (Laboratory of Ultrasonics of the Institute of Rail-  
road Engineers, Budapest)

SUBMITTED: February 10, 1960

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Card 3/3

WEISZBURG, J.; GREGUSS, P.Jr.

The effect of ultrasonic irradiation on electroluminescent panels.  
Acta phys Hung 11 no.2:185-191 '60. (EEAI 9:10)

1. Industrial Research Institute for Telecommunication Technique  
and RSRI Ultrasonic Research Laboratory, Budapest. Presented by  
G.Szigeti.

(Ultrasonics)  
(Luminescence)