

L 34938-66

ACC NR: AP6026600

temperature of the waste gases will increase up to 350-400°C.
Optimum conditions in air preheater operation are described.
The possibilities of using waste gases for the preheating of the
combustion air are evaluated. Orig. art. has: 9 tables. [JPRS: 34,519]

SUB CODE: 13, 20 / SUBM DATE: none / ORIG REF: 001 / SOV REF: 004
OTH REF: 004

Card 2/2 *dy*

L 34938-66 EWF(L)/ETI IJP(c) JD

ACC NR: AP6026600

SOURCE CODE: CZ/0057/65/000/012/0523/0527

AUTHOR: Hadamak, Vladimir

ORG: Metallurgical Projects, Ostrava (Hutni Projekt)

TITLE: Heat losses in heating of air for blast furnaces

SOURCE: Hutnik, no. 12, 1965, 523-527

TOPIC TAGS: blast furnace, heating, heat loss, heat of combustion, heat insulation, air heater

ABSTRACT: The air temperature influences the combustion temperature on the grate, and the consumption of the coke. The causes of heat losses from the air between the air heaters and the air inlet into the furnace are analyzed. Locations of possible leaks of hot air to the atmosphere are described. Location of spots where heat is lost by radiation and conduction from the air ducts is discussed. Suitable areas, where heat economy can be achieved by insulation, are given. The overall heat losses from the duct are about 12%; substantial improvement in elimination of these losses is not possible. The losses in waste gases amount to about 20% of heat input; important reduction of the losses is not probable. When air temperatures are increased,

Card 1/2

07/6 2275

HADABAS, B.

SCIENCE

PERIODICALS: ~~ACTA ZOOLOGICA. Vol. 4, No. 7/8 July/Aug. 1950~~
~~MAGYAR KEMIAI FOLYOIRAT. Vol. 34, No. 7/8 July/Aug. 1950~~

Hadabas, B. Data on the chromatography of thionin. p. 240

Monthly List of East European Accession (MEAT) 10, VOL. 2, No. 2,
February 1950, Unclass.

MAJSAI, Jozsef; HADA, Sandor

The first Hungarian methane gas pipeline has been finished.
Term tud kozl 7 no.9:428 S '63.

HADA, Sandor

Application for admission! Ipari energia 4 no.1: 3 of cover
Ja '63.

1. Energiagazdalkodasi Tudomanyos Egyesulet Pecsii Csoportja.

HADA, Sandor

Use of the Mecsek hard coal generators. Term tud kozl
7 no.9:430 S '63.

HADA, Sandor

Appeal for reporting! Energia es atcm 16 no.1:3 of cover Ja '63.

1. Energiagazdalkodasi Tudomanyos Egyesulet Pecsé Csoportja.

HADA, Sandor; VODL, Emma

Quantitative analysis of carbon monoxide in gas generator plants. Ipari energia 3 no.3:51-54 Mr '62.

1. Pecsí Kokszmüvek.

HADA, Sandor

Some fields of application of gas analyzers in the gas industry. Energia es atom 14 no.8/9:365-371 S '61.

1. Pecsí Koksüzüvek.

HADA, Sandor, vegyeszmernok (Pecs)

The role of natural gas in the gas supply of cities. Term tud kozl
5 no.2:58-61 F '61.

DEAK, Bertalan (Pecs); ~~HADA, Sander (Pecs)~~; RAPP, Tamas (Budapest);
SZUCS, Miklos (Budapest)

Possibility of using the residual of the intermediate-pressure hydrogenation (Varga process) in coal distillation. Magyar kem lap 15 no.12: 525-529 D '60.

1. Pecs Kokszeveg(for Deak and Hada) 2. Orszagos Energiagazdalkodasi Hatosag(for Rapp). 3. Fovarosi Gazzeveg(for Szucs).

HADA, Sandor

Gasification of coal with low coking capacity and high ash content
from the Pecs coal basin in gas generators. Peci musz szeml 5 no.3:
1-9 J1-S '60.

MAHA, S.

Distribution of heavy hydrocarbons in city gas. r.710

ENERGIA ES AYTACHENIKA. (Energiaozdalkedesi Talsenyon Svyozhet)
Budapest, Hungary
Vol. 11, no.11/12, Nov./Dec. 1973

Monthly List of East European Accessions (SIAS) 10., Vol. 7, no.7, July 1970
Incl.

HUNGARY/Chemical Technology - Chemical Products and Their
Application. Chemical Processing of Solid Fossil
Fuels.

Abs Jour : Ref Zhur - Khimiya, No 10, 1959, 3633^h

Author : Hada, S.

Inst :

Title : The Production of Generator Gas in Hungary.

Orig Pub : Energia es Atomtechn., 1958, 11, No 3, 154-160.

Abstract : From the obtained coal in Hungary, about 10% go into gas-generating installations; the production of the latter covers 34% of the total gas production. Pointing out the great significance of gas generators in the Hungarian power economy, the author analyzes the shortcomings inherent in their exploitation: the low grade and lack of coordination of the incoming coals, the large percentage of pulverized coal, etc. Various improvements of domestic gas generators, the utilization of automatic devices and

Card 1/2

11-115

HADA, E.

Never date on the distillation of a coal-oil mixture.

p. 210 (Ma-yar Koni-kusek Lapja. Vol. 12, no. 7/8 July/Aug. 1917, Budapest, Hungary)

Monthly Index of East European Accessions (IEA) IC. Vol. 7, no. 2,
February 1 58

HADA, S.

Production of municipal gas from methane gas.

p. 1 (Energia és Atomtechnika) Vol. 10, no. 1, Apr. 1957, Budapest, Hungary

SO: MONTHLY INDEX OF GAS. EUROPEAN ACQUISITIONS (X AL) 10, VOL. 7, NO. 1, JAN. 1959

HADA, SANDOR

HUNGARY / Chemical Technology: Chemical Products and Their
Application - Treatment of solid mineral fuels

J-8

Abs Jour : Referat Zhur - Khimiya, No 2, 1958, 5844

Author : Hada Sandor

Inst : Not given

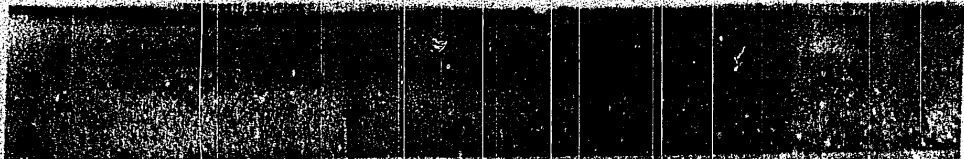
Title : Gasification of Low Clinkering Capacity Coal

Orig Pub : Magyar energiagazd., 1956, 9, No 8, 306-310

Abstract : A brief review of the types of gas generators used in
gasification of low-grade varieties of coal. Bibliography
6 references.

Card 1/1

HACZEWSKI, W.



POLON

1955...
Metallurgical Investigations, Zaklady Badawczych i Technicznych
w Obszarach Metaloznawstwa (Pulla), W. Haczeński, Z.
Wojcik, and J. Ogermin. Prace Instytutu Hutnictwa i
Metalo., vol. 2-4, 1955, pp. 179-184 - 4 plates
Determines cause of premature deterioration of railroad rail
cracking of carburized alloy steel gears, and beam drawing
failures of low C steel sheet products. Micrographs, photo-
graphs, diagrams, graphs.

2

HACURA, V., inz.

Pressing of bearing balls from plastic materials. Automatizace
12 no.5:218 8 Ag '62.

HAGINDA, Stefan

largest Ozechnostrek area of petroleum deposit
7 no.4:118-121 no. 165.

HACKI, K.

Production of smoked glass and glass for welding, p. 262, SKLAR A
KERAMIK (Ministerstvo lehkého průmyslu) Praha, Vol. 4, No. 10, Oct.
1954

SOURCE: East European Accessions List (EEAL) Library of Congress,
Vol. 4, No. 12, December 1956

L 04879-67

ACC NR: AP6025067

is used together with the concept of "nondangerous" points at the asymptotic stability boundary to construct a mathematical model of neutral stability. Two cases of systems with variable coefficients are examined which can be reduced to the linear model with constant coefficients. The first case is a relative, weak variation of the coefficients of linear approximation, and the second, a sufficiently slow variation of these coefficients. Finally, the case is examined in which the parameters do not satisfy the necessary conditions for the reduction of a system to a linear system with constant coefficients. Characteristic for this case is the straight horizontal flight at variable speed. Using Lyapunov's direct method, stability criteria are derived in the form of a necessary condition for asymptotic stability. The criteria indicate that stability loss does not depend on velocity or acceleration, but is rather associated with a feature of the motion. Orig. art. has: 2 figures, 1 table, and 22 formulas.

SUB CODE: 12,20/ SUBM DATE: 15Nov65/ ORIG REF: 002/ OTH REF: 010/ SOV REF: 003

nd
Card 2/2

L 04879-67 EWP(m) WVH

ACC NR: AP6025067

SOURCE CODE: RU/0019/66/011/002/0363/0381

AUTHOR: Hacker, T.

37
B

ORG: Institute of Fluides Mechanics, Academy of the Socialist Republic of Rumania, Bucharest
(Institut de Mecanique de Fluid de l'Academie de la Republique Socialiste de Roumanie)

TITLE: Some nonclassical problems of flight stability [Paper presented at the Conference on Mechanics held in Bucharest in September 1965]

SOURCE: Revue Roumaine des sciences techniques. Serie de mecanique appliquee, v. 11, no. 2, 1966, 363-381

TOPIC TAGS: motion stability, aerodynamic stability, mathematic model, stability equation, linear approximation

ABSTRACT: Several flight stability problems are discussed for which the mathematical model based on linear equations with constant coefficients does not hold. The quasicritical case of systems with constant parameters (autonomous systems) situated at the interface between the domains of asymptotic stability and instability (where linear approximation no longer describes the actual process) is discussed. In particular, the practical significance of the concept of neutral stability is examined, and the mathematical concept of practical stability (ϵ_0 -stability")

Card 1/2

UDC: 533:531,1

L 35874-66

ACC NR: AP6022639

of the following parameters as control variables: longitudinal control moment, the magnitude and the direction of the thrust, the incidence, and the slope of the velocity vector with respect to the horizon. Optimal trajectories of the c.g. which are formed by three types of curves corresponding to vertical ascent, level flight, and flight with variable flightpath angle are presented in graphs. Some aspects of the construction of the mathematical algorithm are discussed. Orig. art. has: 3 figures, 32 formulas and 6 tables. [AB]

SUB CODE: 01/ SUBM DATE: 17Jan66/ ORIG REF: 001/ ATD PRESS: 5036

Card 2/2 *MB*

L 35874-66 T-2/EWP(h)

ACC NR: AP6022639

SOURCE CODE: RU/0019/66/011/003/0659/0682

AUTHOR: Hacker, T.

ORG: Institute of Fluid Mechanics, Academy of the Socialist Republic of Rumania (Institut de Mecanique des fluides de l'Academie de la Republique Socialiste de Roumanie)

TITLE: Optimal control of a VTOL aircraft A

SOURCE: Revue Roumaine des sciences techniques. Serie de mecanique appliquee, v. 11, no. 3, 1966, 659-682

TOPIC TAGS: vtol aircraft, optimal control, time optimal control, optimum trajectory, thrust control

ABSTRACT: The problem of determining the laws of optimal control of VTOL aircraft for ascent to a given altitude and acceleration to a given horizontal velocity in minimum time or with minimum fuel consumption is considered. A theoretical definition of the control variables according to the parameters which determine the flight regime is presented on the basis of the author's previous work. Adequate classification of the variables is presented and their use in the construction of a mathematical model based on the Pontryagin theory of the maximum is described. General equations are derived for the case of a fixed thrust axis, then the laws of ascent and acceleration with minimum fuel consumption and in minimum time are established using one or many

Card 1/2

UDC: 531.3

НАУКА, Т.

Linear progress in the dynamics of flight. Sci. Study. Ser.
no. 17 n. 15:1187-1205 '64.

1. "Doklan Vyle" Institute of applied Mechanics of the Ukrainian
Academy, Dnepropetrovsk. Submitted December 2, 1964.

ACCESSION NR: AP4042092

R/0008/64/015/002/0433/0440

AUTHOR: Hacker, T.

TITLE: Optimum takeoff command of VTOL planes with mobile traction axis

SOURCE: Studii si cercetari de mecanica aplicata, v. 15, no. 2, 1964, 433-440

TOPIC TAGS: ascent time, variational calculus, space trajectory, horizontal speed, longitudinal altitude

ABSTRACT: The author seeks to determine the variation in the amount and direction of traction which would assure 1) the minimum ascent time to a given height and to attain given horizontal speeds, or 2) the attainment of a given height and horizontal speed with minimum fuel consumption. The problem is considered simplified in relation to unchanged longitudinal altitude. Orig. art. has: 16 equations and 1 table.

ASSOCIATION: none

SUBMITTED: 22Dec63

ENCL: 00

SUB CODE: SV, MA

NO REF SOV: 001

OTHER: 000

Card
1/1

HACKER, T.

"Molding the contour of aircraft controls" by I. V. Ostoslavskiy
and I. V. Strazheva. Reviewed by T. Hacker. Studii cerc mec apl
13 no.1:251-253 '62.

HACKER, T.

"Aircraft as an object of control" by V. S. Vedrov, G. L. Romanov,
and V. A. Surina. Reviewed by T. Hacker. Studii cerc mec apl 13
no.1:249-251 '62.

HACKER, T.-----

Evaluating the admissible lag in the automatic stabilization of flight. Comunicarile AR 12 no.8:909-913 Ag '62.

1. Comunicare prezentata de academician E. Carafoli.

Longitudinal stability of an ...

R/008/62/015/003/002/006
D272/D308

analyze the influence of the problem data - including the lag of
the automatic device - upon the flight stability.

SUBMITTED: February 27, 1962

✓
B

Card 2/2

R/008/62/015/003/002/006
D272/D308

13,2000

AUTHOR: Hacker, T.

TITLE: Longitudinal stability of an aircraft with automatic pilot

PERIODICAL: Studii și cercetări de mecanică aplicată, no. 3, 1962, 575 - 595

TEXT: The problem of longitudinal stability of automatically piloted aircraft is examined by establishment of a mathematical model for the parameters taking the lag into account. An ideal automatic pilot is defined by putting the lag equal to zero and it is assumed that the dynamic system aircraft-ideal automatic pilot is stable; the author then estimates the magnitude of the lag for which the stability is conserved. A direct graphic procedure for treatment of the stability problem of an aircraft with real automatic pilot is also developed, which does not require preliminary consideration of the stability with an ideal automatic pilot. It is based on a method described in a previous paper by the author and enables one to

Card 1/2

✓
B

On the flight qualities ...

2/003/52/555/001/555/007
5272/5504

characteristics of controllability. The degree of instability (the velocity with which the deviation amplitude increases) and the oscillation frequency of the disturbance are evaluated. It is shown that the stability in the cruising regime is mainly affected by the gyroscopic moments of the rotating organs of the engine. In this case the possibility is indicated for reducing the problem to the case of a conventional aircraft. A numerical example is given. There are 4 references: 2 Soviet-bloc and 2 non-Soviet-bloc. The references to the English-language publications read as follows: M. J. Duncan, Principles of Control and Stability of Aircraft, Cambridge University Press, (1952); T. Hucker, Journal of the Aerospace Sciences, 28, no. 1, Jan. 1961.

SUBMITTED: October 26, 1961

Card 2/2

X

10.1240

34913

R/000/02/000/001/005/007
0272/0304

AUTHOR: Hacker, A.

TITLE: On the flight qualities of partially controlled VTOL aircraft (without an automatic pilot)

PERIODICAL: Mecanica aplicata, no. 1, 1962, 31-46

TEXT: The flight qualities of vertical take-off and landing aircraft are examined, after first discussing the need to take into account the gyroscopic effect of the rotating organs of the engines and to study the perturbed movement for certain specific regimes (base motions), characterized by small or zero flight velocities. The latter requires investigation of the perturbed motion of the dynamic system - aircraft-pilot (human or automatic). It is shown that in the case of hover flight, the dominant forces are the traction by the engines and the forces and mass moments of inertia. Disturbed motion about the aircraft center of gravity is studied, assuming that the motion parameters of the center of gravity itself are constrained. This is useful for determining the

Card 1/2

X

On the applicability limits of a stability theory. ²⁶¹⁰¹ R/008/60/000/006/006/008
A231/A126 X

(No. 1 Definition) in function of the θ positive values requires a special interest in case of applications. The author demonstrates an evaluation process of this quantity. There are 2 Soviet bloc references.

SUBMITTED: May 12, 1960

Card 3/3

5/12/81/001/005/005/008
A01/0125

On the applicability limits of a stability theory...

X and ξ are vectors of the same dimension as x and ξ respectively, having as components some functions, being generally nonlinear, of the n components of x and of the l components of ξ , as well as of the independent variables. It is supposed that the stabilizing intervention stops as soon as a deviation of the controlled parameters are eliminated ($\xi = 0$), and reappears only in case that at least one of these deviations receives a value other than 0, i.e., if the system

$\frac{dx}{dt} = X^0(t, x, \xi)$, and $\frac{d\xi}{dt} = \xi^0(t, x, \xi)$, represents the equation system of the free disturbed motion, when $X^0(t, x, 0) = X^1(t, x, 0) = X^2(t, x)$. No. 1 Definition. The simple solution of the auxiliary system $\frac{d\xi}{dt} = X^1(t, x)$ (3) is stable in relation to $\xi = 0$ in case there are two even $\epsilon > 0$ two functions $\delta(\epsilon)$ and $\eta(\epsilon)$ in such a way that $|\xi(t)| < \delta(\epsilon)$, $|x(t) - x_0| < \eta(\epsilon)$ than $|x(t)| < \epsilon$ for $t > t_0$, $x(t_0) = x_0$ being the solution of the $\frac{dx}{dt} = X^2(t, x, \xi(t))$ system, corresponding to the initial condition $x(t_0) = x_0$. No. 2 Definition. The simple solution of the auxiliary system is asymptotically stable in relation to $\xi = 0$, for which $\lim_{t \rightarrow \infty} x(t, t_0, x_0) = 0$ if the conditions of the No. 1 Definition are satisfied and the relation $\lim_{t \rightarrow \infty} x(t, t_0, x_0) = 0$ takes place. Theorem. If the simple solution of the auxiliary system is uniformly asymptotically stable, it is asymptotically stable in relation to $\xi = 0$. The evenness of the δ quantity

10 4000

20754

3/22/40/001/006/006/008
 REF. 4015



AUTHOR: Hacker, Y.

TITLE: On the application of theory of a stability theory of the partially controlled motion of an aircraft

PERIODICALS: Studiul si cercetari de mecanica aplicata, no. 6, 1963, 1,581 - 1,585

TEXT: In a previous article (Ref. 1) the author states a system of an n-th order reduced degree of freedom. Studiul si cercetari de mecanica aplicata, no. 10, 3 (1959). The author has shown that in case of partially controlled motion of an aircraft, the distributed motion can be studied on the basis of a system of differential equations in which appear only the non-controlled kinematic parameters. This system was called the associate system. The mathematical model of the partially controlled motion is then described as follows: considered in the system $\frac{dx}{dt} = X(x, \xi)$ and $\frac{d\xi}{dt} = \Xi(x, \xi)$, where $X(x, \xi) = 0$ and $\Xi(x, \xi) = Y(x, x)$ representing the distributed motion of partially controlled aircraft. x and ξ represent the vector of the non-controlled and controlled parameters of which are the deviations of the free and controlled kinematic parameters.

Card 1/3

HACKER, T.

Stability of an airplane with a reduced number of freedom degrees. p.655

STUDII SI CERCETARI DE MECANICA AERONAUTICA. Academia Republicii Populare Romine
Bucuresti, Rumania
Vol. 10, no.3, 1959

Monthly List of East European Accessions (FEAT) I.C., Vol. 9, no.1, Jan. 1960
Uncl.

E0412

RUM/8-59-1-3/24

On the Longitudinal Stability of Aircraft in Case of Repeated Disturbances

In case of vertical squalls acting on the aircraft as repeated disturbance, a good damping is required which can be obtained by large absolute values of the rotation derivatives

$$\left(\frac{\partial c_m}{\partial \dot{\alpha}} \quad \text{and} \quad \frac{\partial c_m}{\partial \alpha} \right).$$

A large value of the coefficient of static stability $\left(\frac{\partial c_m}{\partial \alpha} \right)$, supplies no dynamic stability in a quick phase of the disturbed motion. There are 2 references, 1 of which is Rumanian and 1 Russian.

SUBMITTED: October 15, 1958

Card 6/6

✓

80412

RUM/8-59-1-3/24

On the Longitudinal Stability of Aircraft in Case of Repeated Disturbances

$$\eta_y = \rho_y = a\phi_v,$$

$$\eta_u = \rho_u = \sigma\phi_v$$

in which "a" represents the curve shape $c_z = f(\alpha)$ and σ a value proportional to the coefficient of the static stability

$$\left(\sigma = \frac{m}{I_B} \frac{\partial c_m}{\partial \alpha} \right).$$

The coefficients of the square form $W = \alpha_{22}y^2 + 2\alpha_{24}yu + \alpha_{44}u^2$ can be determined from $U = \frac{dW}{dt} = -(y^2 + u^2)$. The author then derives the vertical component from the condition (b):

$$\phi_v < \left\{ \frac{(y^2 + u^2) \min}{a|\alpha_{22}y + \alpha_{24}u|_{\max} + \sigma|\alpha_{24}y + \alpha_{44}u|_{\max}} \right\}_{W=c^2} \quad (6)$$

and establishes a practical calculation formula as follows: Starting with the minimum of the $y^2 + u^2$ sum, he derives the approximate formula for the determination of the admissible limit of the vertical squalls speed:

$$V_v \text{ lim} = \frac{2W(\epsilon_y, \epsilon_u)}{\left[\sqrt{(\alpha_{22} - \alpha_{44})^2 + 4\alpha_{24}^2} + \alpha_{22} + \alpha_{44} \right] [a\alpha_{22} + \sigma|\alpha_{24}|]\epsilon_y + (a|\alpha_{24}| + \sigma\alpha_{44})\epsilon_u} \quad (7)$$

Card 5/6

4

Eq. 12.

RUM/8-59-1-3/24

On the Longitudinal Stability of Aircraft in Case of Repeated Disturbances

follows: x_0, y_0, u_0 in (a) are replaced by $\gamma_x, \gamma_y, \gamma_u$ and z_0 can have an arbitrary value. In (b) the minimum module value of the function U on the ellipsoid $W = c^2$ is taken, and the constants ρ_x, ρ_y, ρ_u are substituted by the expressions (4). Changing now the inequality signs in (a) and (b) into equality signs, the required admissible limits for φ_v and φ_h are obtained. In case of simplified vertical squalls ($\varphi_h = 0$) and a constant speed, the problem can be treated by the simplified theory of the quick disturbance motion and the equation system can be reduced to an equation of the second order:

$$\begin{aligned} \frac{dy}{dt} &= a_{22}y + u + R_y(t, y, z, u) \\ \frac{du}{dt} &= a_{42}y + a_{44}u + R_u(t, y, z, u) \end{aligned} \quad (5)$$

The characteristic equation of this system, without the addings R_y and R_u , admits in case of statically stable aircraft a pair of complex conjugated roots. The real part of the roots, notated with μ ($\mu = 1/2(a_{22} + a_{44})$), is negative. The constants $\gamma_y, \gamma_u, \rho_y, \rho_u$ depend only from φ_v , having the following shape:

Card 4/6

80412

RUM/8-59-1-3/24

On the Longitudinal Stability of Aircraft in Case of Repeated Disturbances

which supply the required relations. Air squalls are considered as repeated disturbances. In this case the constants η_x, η_y, η_u and ρ_x, ρ_y, ρ_u are evaluated by the functions of the speed of air currents. The horizontal and vertical components of the air current speed in case of a nondisturbed flight are notated with \hat{v}_h and \hat{v}_v . Supposing that the nondimensional values \hat{v}_h and \hat{v}_v are small enough to be neglected in a series development of the nonlinear power terms, then are $\hat{v}_v \approx \Delta\alpha_{max}$ and $\hat{v}_h = \Delta V_{max}$ and the following relations can be established:

$$\begin{aligned} \eta_x = \rho_x &= \left| c_x \hat{v}_h + \frac{\partial c_x}{\partial \alpha} \hat{v}_v \right| \\ \eta_y = \rho_y &= \left| c_z \hat{v}_h + \frac{\partial c_z}{\partial \alpha} \hat{v}_v \right| \\ \eta_u = \rho_u &= \left| \frac{\hat{m}}{I_B} \left(c_m \hat{v}_h + \frac{\partial c_m}{\partial \alpha} \hat{v}_v \right) \right|. \end{aligned} \quad (4)$$

In case the components \hat{v}_h or \hat{v}_v are not small compared with the non-disturbed flying speed V , the same relations remain valid, however, the respective maximum values will be taken for the aerodynamical coefficients and their partial derivatives. The relations (a) and (b) are used as

80412

RUM/8-59-1-3/24

On the Longitudinal Stability of Aircraft in Case of Repeated Disturbances

virtue of the homogeneous linear system is identically equal to the function U . The coefficients of the square form $W(x, y, z, u)$ can be determined from the condition that dW/dt of the homogeneous linear system should be equal with the square form U for all values of the functions x, y, z, u . It is also required that the deviations x, y, z, u should never, after the initial moment t_0 , exceed the constant quantities $\epsilon_x, \epsilon_y, \epsilon_z, \epsilon_u$ taken from the factors of security, comfort, etc. The deviations of the angle of attack (ϵ_y) and of the longitudinal angular speed (ϵ_u) should never exceed a certain limit. The deviations of the flying speed (ϵ_x) and of the rocking angle (ϵ_z) can vary within wider limits. The purpose of the aircraft (passanger, military, etc.) has to be considered, too. The author then presents a rational calculation, analogous to that used by I.G. Malkin [Ref 2] for the demonstration of the stability theorem in case of disturbances with continuous action. Starting with the ellipsoid $W(x, y, z, u) = c^2$, the author establishes 2 inequalities:

$$W(x_0, y_0, z_0, u_0) < c^2 \quad (a)$$

$$\left\{ U(x, y, z, u) + \left| \frac{\partial W}{\partial x} \right| \rho_x + \left| \frac{\partial W}{\partial y} \right| \rho_y + \left| \frac{\partial W}{\partial u} \right| \rho_u \right\} W = c^2 < 0 \quad (b)$$

Card 2/6

✓

80412

RUM/8-59-1-3/24

1,4000

AUTHOR: Hacker, T.TITLE: On the Longitudinal Stability of Aircraft in Case of Repeated Disturbances

PERIODICAL: Studii si Cercetări de Mecanică Aplicată, 1959, Nr 1, pp 70 - 76 (RUM)

ABSTRACT: This article deals with the behavior of aircraft in an atmosphere of repeated squalls. The classical theory of aircraft stability considers only the case of isolated disturbances. The practical flight necessities of today require a study of repeated disturbances acting during the disturbed motion. In a previous article [Ref 1] the author already indicated a method for this case. The evaluation obtained was only a general one, the required degree of damping referring to the sum of the deviation modulus. The practical problem consists in establishing how small the initial disturbances and the disturbing forces with a continuous action should be in order to guarantee the required degree of damping. Based on the Liapunov function the author presents a solution of this problem. Since the roots of the characteristic equation of the linear homogeneous system have real negative parts, to every negatively defined square form U correspond a positively defined square form W , and one single part, the derivative of which in ratio with the time taken in

Card 1/6

HACKER, T.

Behavior of a plane in flight through an agitated atmosphere. p. 983.

Academia Republicii Populare Romine. Institutul de Mecanica Aplicata.
STUDII SI CERCETARI DE MECANICA APLICATA. Bucuresti, Rumania. Vol. 8, no. 4,
1957.

Monthly list of East European Accessions (EEA) IC, Vol. 8, no. 8, Aug. 1959

Uncl.

HACKER, T.

Distr. 4F1

✓ 4675. Hacker, T., On a problem of partial stability of aircraft
(in Russian), Acad. Repub. Pop. Romane, Rev. Mecan. appl. 2, 2,
1957.

Classical stability criteria, such as the Routh-Hurwitz criterion,
do not give indications concerning the separate behavior of kine-
matic parameters. If one of the parameters grows larger, these
criteria indicate instability even in the case when the behavior of
this parameter is of no importance to the problem.

With this idea in mind, author presents a procedure to find condi-
tions which should insure the damping of the deviation of the in-
cidence angle, or that of the rate of pitch. Expressions are given
which relate the initial value of the disturbance to the time inter-
val within which a certain previously given damping velocity is in-
sured for the discussed kinematic parameters.

Staff, Revue de Mécanique Appliquée
Acad. Repub. Pop. Romane, Rumania

Pa
/

6
1

TK
adp

HACKER, T.

A problem of the stability of airplanes for a finite-time interval.

P. 1345 (Academis Republicii Populare Romine. Comunicarile. Vol. 6, no. 12, Dec. 1956
Bucuresti, Rumania)

Monthly index of East European Accessions (EEAI) LC. Vol. 7, no. 2,
February 1958

HACKER, T.

Contributions to the study of longitudinal stability of an airplane in most unfavorable evolutions. p. 268. Academia Republicii Populare Romine. Institutul de Mecanica Aplicata. STUDII SI CERCETARI DE MECANICA APLICATA. Bucuresti. Vol. 6, no. 3/4, July/Dec. 1955.

So. East European Accessions List Vol. 5, No. 9 September, 1956

HACKER, T..

Evaluation of the speed of amortization of perturbations in horizontal
rectilinear flight when the basic motion of the airplane is not permanent.
p. 1731. Academia Republicii Populare Romine. COMUNICARILE. Bucaresti.
Vol. 5, no. 12, Dec. 1955.

So. East European Accessions List Vol. 5, No. 9 September, 1956

HACKER, T.

A criterion of longitudinal stability of an airplane in the time of the short period of perturbed motion for nonpermanent, horizontal, and rectilinear motion. p. 1635. Academia Republicii Populare Romine. COMUNICARILE. Bucuresti. Vol. 5, no. 11, Nov. 1955

So. East European Accessions List Vol. 5, No. 9 September, 1956

HACKER, Tiberiu

✓ Contribuții la Studiul Stabilității Longitudinale a Avionului în Evoluțiile sale mai Defavorabile. Tiberiu Hacker. Stud. Cerc. Mat. ~~Akad. Rom. Stiin.~~ 1955, pt. 200-207. 10 refs. In Russian. Study of the longitudinal stability of an aircraft under unfavorable conditions. Equations of motion are derived for trajectories of rectilinear motion, and the perturbation amplitude of the angle of incidence and of the angular velocity of pitch is determined.

Good
Siv

DE [initials]

HACKER, PETER

GOMORI, Pal; TAKACS, Lajos; KALLAY, Kalman; DUDAS, Gizella; BOHANSZKY, Ferencne;
HACKER, Peter

Effects of isolated cerebral anoxia on pulmonary circulation. Magy.
Tudom. Akad. Biol. Orv. Oszt. Kozl. 8 no.3:269-275 1957.

1. A Budapesti Orvostudományi Egyetem III. sz. Belklinikája.
(CEREBRAL ANOXIA, exper.
eff. of arterial anoxia on pulm. circ. in dogs (Hum))
(BLOOD CIRCULATION
pulm. eff. of exper. cerebral arterial anoxia in dogs (Hum))

RUMANIA/Chemical Technology. Chemical Products and Their
Applications. Leather. Fur. Gelatin. Tanning
Materials. Industrial Proteins.

II

Abs Jour: Ref Zhur-Khim., No 8, 1959, 29935.

Author : Hovas, G., Minculescu, ..., and Hacker, N.

Inst :

Title : The Dressing of Chrome-Tanned Stock.

Orig Pub: II-a Conf Tehn-Stiant a Ind Usoare Piele, Cauciuc,
Sticla (Bucuresti), ASIT, 70-80 (1957) (in Rumanian)

Abstract: The authors have investigated various methods used
for the dressing of chrome-tanned stock in order to
determine optimum conditions for the liming, pickling,
tanning, neutralization, retanning, and finishing
of the stock. The possibility of the utilization of

Card : 1/2

HACKENSELLNER, H.A.; TOPELMANN, I.

The endothelial surface of the carotid artery in rabbits
after double ligation. Acta morph. acad. sci. Hung. 13
no.4:359-375 '65.

I. Pathologisches Institut (Direktor: Prof. Dr. L.H. Kestler),
Humboldt-Universität Berlin, Rudolf-Virchow-Haus der Charité,
Submitted October 15, 1964.

HACKENSELINER, H. A.

Prosekt. Wilhelminenspit., Wien. *Zur Pathologie der tumorösen neurogenen Hyperplasien (Neurome, Neurofibrome) und hyperplasiogenen malignen neurogenen Geschwülste des Magen-Darmtraktes. The pathology of tumour-like neurogenic hyperplasias (neuromata and neurofibromata) and malignant hyperplastic neurogenic tumours of the alimentary tract ACTA MORPH. ACAD. SCIENT. HUNG. (Budapest) 1953, 3/3 (325-352) Tables 6 Illus. 6

Report on 10 cases of neuromata and 2 cases of fibromata. Discussion of neurogenic tumours in the different parts of the alimentary tract, the predilection for sex and age, the clinical symptoms, the macro- and microscopical appearances. A simple origin of the neuromata is accepted and the changing fine structure of these growths is considered as a form of expression of the tissue relations between growth and the whole of the organ. A differentiation which goes further than the pure description of these tumours is, however, no practical or aetiological and genetic necessity. Author (VIII, 5, 16)

SO: Excerpta Medica; Section VIII Vol. 7 No. 11

I. 15202-66

ACC NR: AP6028780

ethanol was acylated with methacrylic and acrylic chlorides. 2-Nitro-2, 2-bis-(nitrate-methyl)ethyl methacrylate was a polymerizable product of reaction with methacrylic chloride. Acrylic chloride gave a product which was not well identified and which underwent rapid and spontaneous polymerization. Polymers showed inflammable properties of high degree. Para-nitrobenzoate and 3, 5-dinitrobenzoate of 2-nitro-2, 2-bis(nitrate-methyl) ethanol were prepared. Absorption infrared spectra were obtained for 2-nitro-2, 2-bis(nitrate-methyl) ethanol as well as for methacrylate and acrylate of 2-nitro-2, 2-bis(nitrate-methyl)ethyl. Orig. art. has: 3 formulas and 3 tables. [Authors' abstract] [AM]

SUB CODE; 07/ SUBM DATE: 07Oct66/ ORIG REF: 004/ OTH REF: 001/

hs

Card 2/2

L 4 202-66 EWP(j)/T WW/RM/JW
ACC NR: AP6028780 SOURCE CODE: PO/0014/66/045/006/0321/0324

AUTHOR: (Legocki, J.; Rodowicz, H.) Hackel, Juliusz

ORG: Institute of Organic Industry, Warsaw (Instytut Przemysłu Organicznego w Warszawie)

TITLE: Nitrate-alkyl esters of α, β -unsaturated acids. Part 2. Synthesis of 2-nitro-2, 2-bis(nitrate-methyl) ethanol

SOURCE: Przemysl chemiczny, v. 45, no. 6, 1966, 321-324

TOPIC TAGS: nitration, nitrate alcohol, methacrylic acid, polymerization, acrylic chloride, methacrylic chloride

ABSTRACT: A new nitrate-alcohol, 2-nitro-2, 2-bis(nitrate-methyl) ethanol was obtained by acid hydrolysis of 2-nitro-2, 2-bis(nitrate-methyl)ethyl acetate. 2-Nitro-2, 2-bis(nitrate-methyl)ethyl acetate was synthesized by three different methods: acetylation of the product of partial oxidative nitration of tri(hydroxymethyl)nitromethane (acetate III), nitration of 2-phenyl-5-nitro-5-hydroxymethyl-1, 3-dioxane acetate (acetate IIIa), as well as nitration of 2, 2-dimethyl-5 nitro-5-hydroxymethyl-1, 3-dioxane acetate (acetate IIIb). 2-Nitro-2, 2-bis(nitrate-methyl)

Card 1/2

KUBOSZEK, Rudolf; KUTNIEWICZ, Wieslaw; BACNEL, Juliusz

Peracetic acid; studies on obtaining it. *Przem chem* 42
no.10:551-556 '63.

1. Politechnika, Warszawa.

HACKEL, J.; KUBOSZEK, R.

On the formation of two varieties of diethylene-glycol dinitrate.
Bul chim PAN 8 no.4:143-145 '60. (EEAI 10:9/10)

1. Department II of Organic Technology, Technical University, Warsaw.
Presented by T. Urbanski.

(Diethylene-glycol-dinitrate)

HACKEL, Juliusz; URBANSKI, Tadeusz; KUTKIEWICZ, Wieslaw; STERNINSKI, Andrzej

Viscosity of mixtures $\text{HNO}_3\text{-H}_2\text{SO}_4\text{-H}_2\text{O}$. Chemia stosow 4 no.3/4:441-451
'60. (EEAI 10:9)

1. Katedra Technologii Chemicznej II Politechniki Warszawskiej.

(Viscosity) (Mixtures) (Nitric acid)
(Sulfuric acid) (Water)

Mieczysław Jirbański

F/002/60/000/004/002/003
A221/A126

edition of same is being prepared.

ASSOCIATION: Politechnika Warszawska, Katedra Technologii Chemii i Organologii II
(Department of Organic Chemical Technology II, Polytechnical Institute,
Warsaw)

Card 3/3

P/002/60/000/004/002/003
A221/A126

Bartosz Urbański

compounds. In 1940 he escaped from occupied Poland to France and later to England, where for 6 years he worked at the Research Department of the Ministry of Supply as a senior- and later as principal research officer. In 1946 Professor Urbański returned to Poland and was appointed professor for Organic Chemical Technology at the Polytechnic in Warsaw. For a short time he was the director of the Instytut Przemysłu Chemicznego (Chemical Industry Institute). In 1948, he commenced research on new medicaments. In 1950, he was elected Correspondent Member of the Polish Academy of Sciences and in 1956 Full Member of this institution. He is also member of several scientific associations in Poland and abroad. In 1957, he was elected committee member of the Międzynarodowy Unia Chemii Czystej i Stosowanej (Pure and Applied Chemistry, International Union) and in 1960 member of the East German Leopoldi Science Academy in Halle/Saale. He is member of Chemical Society in London, Society of Chemical Industry, Faraday Society, American Chemical Society and Compton Institute. In 1958, Doctor Urbański was appointed the Manager of the Zakład Syntezy Organicznej PAN (Organic Synthesis Department, Polish Academy of Sciences). He has 250 publications to his credit, among them the monography Teoria Nitrowania (The Theory of Nitration) and 3 vol of Chemia i Technologia Materiałów Wytuchowych (Chemistry and Technology of Explosives), published in 1955. English

Card 4/3

P/002/60/000/004/002/003
A221/A126

AUTHORS: Hackel, Juliusz. and Serafinowa, Barbara

TITLE: Jaceusz Urbański

PERIODICAL: Nauka Polska, no. 4, 1961, 170 - 174

TEXT: A short biography of Professor Doctor Jaceusz Urbański is given. He was born in 1901 in Yekaterinodar (Russia). His studies commenced in 1919 at the Wydział Chemiczny Politechniki (Polytechnical Institute, Chemical Department) at Novocnerkassk and were completed at the Polytechnical Institute in Warsaw in 1924. Still before completion of studies he was employed at the Górnośląska Fabryka Materiałów Wybuchowych (Explosives Plant) in Łaziska Górne. His first paper on explosions was published in 1926. He was sent for two years (1926 - 1928) to France where he worked in various chemical plants and upon his return he joined the Instytut Techniczny Uzbrojenia (Armament Technical Institute) in Warsaw. In 1929, he started lecturing on chemical technology at the Polytechnical Institute in Warsaw. In 1932 Urbański became Doctor of Technical Sciences, in 1933 he passed university professorship examination (habilitation) and in 1936 he was appointed extraordinary professor at the Polytechnic in Warsaw. At this time he studied nitric acid organic

Page 1/3

Distr: 4E3d

Improved trotyl preparation. Tadeusz Urbanski, Juliusz Hackel, Stanislaw Mortka, Kazimiera Szyo-Lewanska, Tadeusz Slobodzinski, and Wieslaw Witke (Katedra Technol. Organicznej II Politech., Warsaw). Przemysl Chem. 38, 551-4(1959).—Nitration of 1 mole toluene with a mixt. of 1.3 moles HNO_3 (d. 1.52) and 1.75 moles Ac_2O (10° , 2 hrs.) gave the mononitration product (I), not (or only slightly) contaminated with the meta isomer. I was further nitrated to di- and trinitrotoluene by usual methods. The purity of the raw trinitrotoluene so obtained was claimed to be sufficiently high to be used as an explosive without addnl. purification. Maria Michalska

8
2.RW(RW/JW)
1 JAS(NB)
1

Distr: 4E2c(j)

5
2 May
1

✓ Theory of nitration. T. Urbanski and J. Hackel (Inst. Technol., Warsaw). *Tetrahedron* 2, 306 (1955); cf. *C.A.* 23, 1865^h.—O-Nitration of starch was examd. by nitration with mixts. of HNO₃, H₂SO₄, and H₂O, and curves relating const. N content in the product to mixt. compn. were plotted on a triangular diagram. Starch, like cellulose, can be nitrated by relatively dil. nitrating mixts. which do not contain NO₂⁺ ions, indicating that undissocd. HONO₂ and NO₂⁻, HNO₂, or NO₂⁻ are also O-nitrating agents. The const. N curves have 2 branches of which the main branches follow the trend of the Sapozhnikov curves [cf. *Z. physik. Chem.* 53, 225(1905)] established for the nitration of cellulose and for the partial vapor pressure of HNO₂. The shorter branches corresponding to mixts. rich in HNO₂ do not follow the trend. The deviation is probably due to the soly. of starch in these mixts. The higher the HNO₂-H₂SO₄ ratio in the nitrating mixts. in the region from 90:10 to 100:0, the greater is the solvent power for starch and at any given HNO₂-H₂SO₄ ratio the higher the N content of the product. Comparison of the action of mixts. rich in HNO₂ on cellulose and starch confirms the importance in nitration of the diffusion of the acids into the cellulose fibers.

C. R. Addinall

CC
1/1

HACKEL, J.

1ST AND 2ND ORDERS

3RD AND 4TH ORDERS

PROCESSES AND PROPERTIES INDEX

24

The preparation and properties of nitrated starch. T. Urbanski and J. Hackel. *Congr. intern. tech. chim. ind. agr. Compt. rend., VI^e congr., Budapest 2, 761-73 (1939)*; *Chem. Zentr.* 1940, I, 1839-0. Earlier work (cf. C. A. 29, 50877; 31, 89279) is summarized and new expts. are reported. Starch preps. having different viscosities gave nitrostarches having almost the same viscosities. By fractionating nitrostarch from an acetone-water mixt.

3 fractions were obtained which had somewhat different N contents but almost the same viscosities. M. G. Moeke

COMMON ELEMENTS

COMMON VARIABLES INDEX

ASME-ISA METALLURGICAL LITERATURE CLASSIFICATION

GROUPS

LETTERS

ALPHABETIC INDEX

HACKEL, J.
AC

PROCESSES AND PROPERTIES INDEX

A-1

Thermal analysis of binary systems containing glyceryl trinitrate. III. J. HACKEL (Rocz. Chem., 1938, 18, 524-529).—The fusion diagrams do not suggest compound formation in the systems glyceryl trinitrate (I)-NH₂CO-NMe₂, -CO(NHMe)₂, -NH₂CO-NPh₂, -NH₂CO-NPhEt, and -NPhMe-CO-NPhEt. (I) gives a 1:3 compound, f.p. 93-2°, with NH₂CO-NHMe, and a 1:2 or 1:3 compound, transition point 75°, with CO(NHEt)₂. R. T.

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

MATERIALS INDEX

OPER

GROUPS

1ST AND 2ND ORDERS

3RD AND 4TH ORDERS

2ND LETTER

1ST AND 2ND LETTERS

3RD AND 4TH LETTERS

5TH LETTER

6TH LETTER

7TH LETTER

8TH LETTER

9TH LETTER

10TH LETTER

11TH LETTER

12TH LETTER

13TH LETTER

14TH LETTER

15TH LETTER

16TH LETTER

17TH LETTER

18TH LETTER

19TH LETTER

20TH LETTER

21ST LETTER

22ND LETTER

23RD LETTER

24TH LETTER

25TH LETTER

26TH LETTER

27TH LETTER

28TH LETTER

29TH LETTER

30TH LETTER

31ST LETTER

32ND LETTER

33RD LETTER

34TH LETTER

35TH LETTER

36TH LETTER

37TH LETTER

38TH LETTER

39TH LETTER

40TH LETTER

41ST LETTER

42ND LETTER

43RD LETTER

44TH LETTER

45TH LETTER

46TH LETTER

47TH LETTER

48TH LETTER

49TH LETTER

50TH LETTER

51ST LETTER

52ND LETTER

53RD LETTER

54TH LETTER

55TH LETTER

56TH LETTER

57TH LETTER

58TH LETTER

59TH LETTER

60TH LETTER

61ST LETTER

62ND LETTER

63RD LETTER

64TH LETTER

65TH LETTER

66TH LETTER

67TH LETTER

68TH LETTER

69TH LETTER

70TH LETTER

71ST LETTER

72ND LETTER

73RD LETTER

74TH LETTER

75TH LETTER

76TH LETTER

77TH LETTER

78TH LETTER

79TH LETTER

80TH LETTER

81ST LETTER

82ND LETTER

83RD LETTER

84TH LETTER

85TH LETTER

86TH LETTER

87TH LETTER

88TH LETTER

89TH LETTER

90TH LETTER

91ST LETTER

92ND LETTER

93RD LETTER

94TH LETTER

95TH LETTER

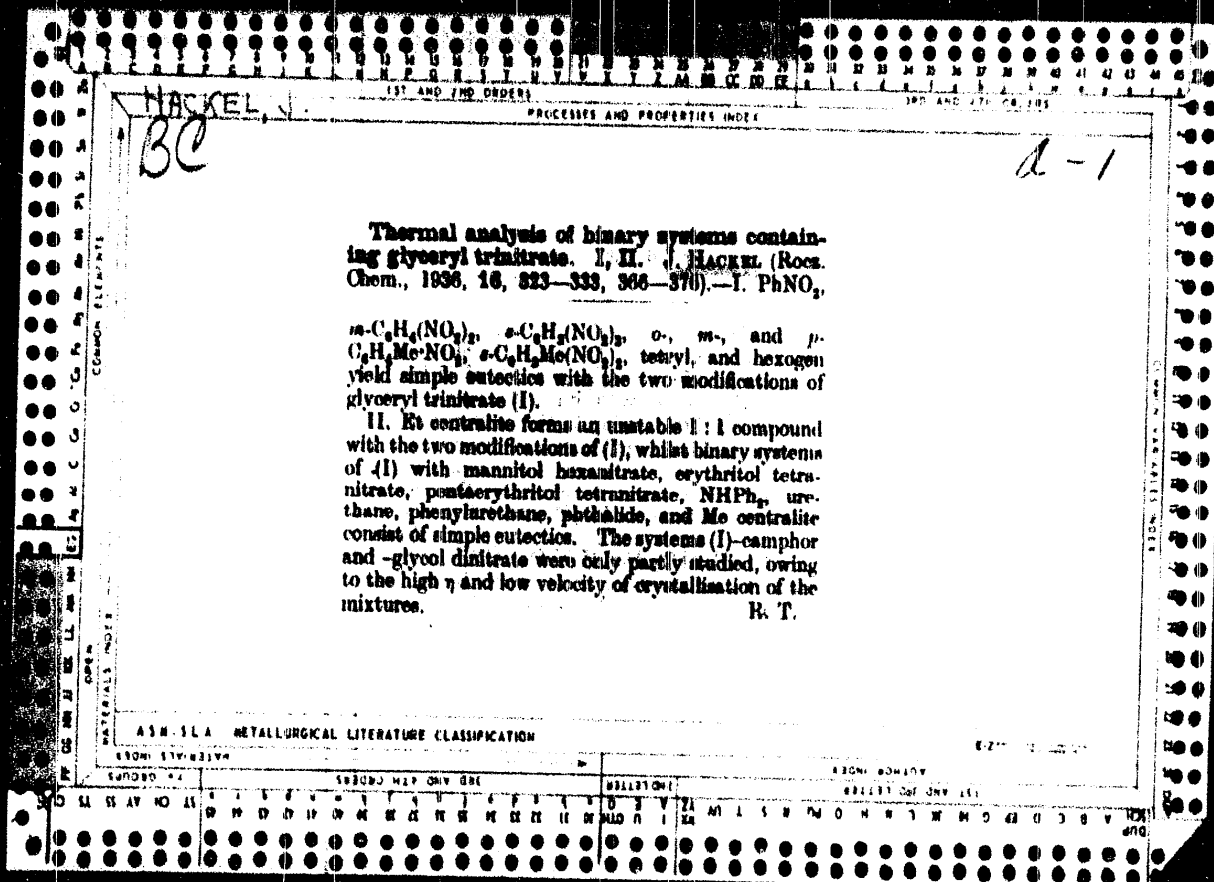
96TH LETTER

97TH LETTER

98TH LETTER

99TH LETTER

100TH LETTER



HACKEL, J. 1ST AND 2ND ORDERS 1ST AND 2ND ORDERS

BC a-3

Properties of the two modifications of glyceryl trinitrate. J. HACKEL (Recs. Chem., 1936, 16, 213-222).—The formation of the stable modification of glyceryl trinitrate, m.p. 13°, is favoured by presence of $C_6H_5(NO_2)_2$ or kieselguhr, whilst cellulose nitrate and Et and Ph carbamate favour crystallisation of the unstable form, m.p. 1.0°; many other substances are without effect. The stable form is more sensitive to shock than the unstable one, but the explosive power and velocity of detonation are the same for both forms. R. T.

COMMON ELEMENTS

MATERIALS INDEX

ASB-31A METALLURGICAL LITERATURE CLASSIFICATION

GROUPS 1ST AND 2ND ORDERS 1ST AND 2ND ORDERS

GROUPS 1ST AND 2ND ORDERS 1ST AND 2ND ORDERS

HACKEL, J.

1ST AND 2ND ORDERS | PROCESSES AND PROPERTIES INDEX | 3RD AND 4TH ORDERS

B | *B-II-11*

Explosive properties of starch nitrates. J. HACKEL and T. UANAIKAI (Przemysl Chem., 1934, 13, 395-401).—A study of the explosive properties (I) of starch nitrates (II), as expressed by the velocity of detonation, the Ph block test, brisance, and the sensitivity to shock, indicates that (I) augment with the N content, and that (II) containing < 9% N have no practical val. as explosives, whilst the (I) of (II) containing > 9% N are comparable with those of $C_6H_5Me(NO_2)_3$ and $HO-C_6H_4(NO_2)_2$. R. T.

COMMON ELEMENTS

OPEN MATERIALS INDEX

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

EXONI STVBIJIA

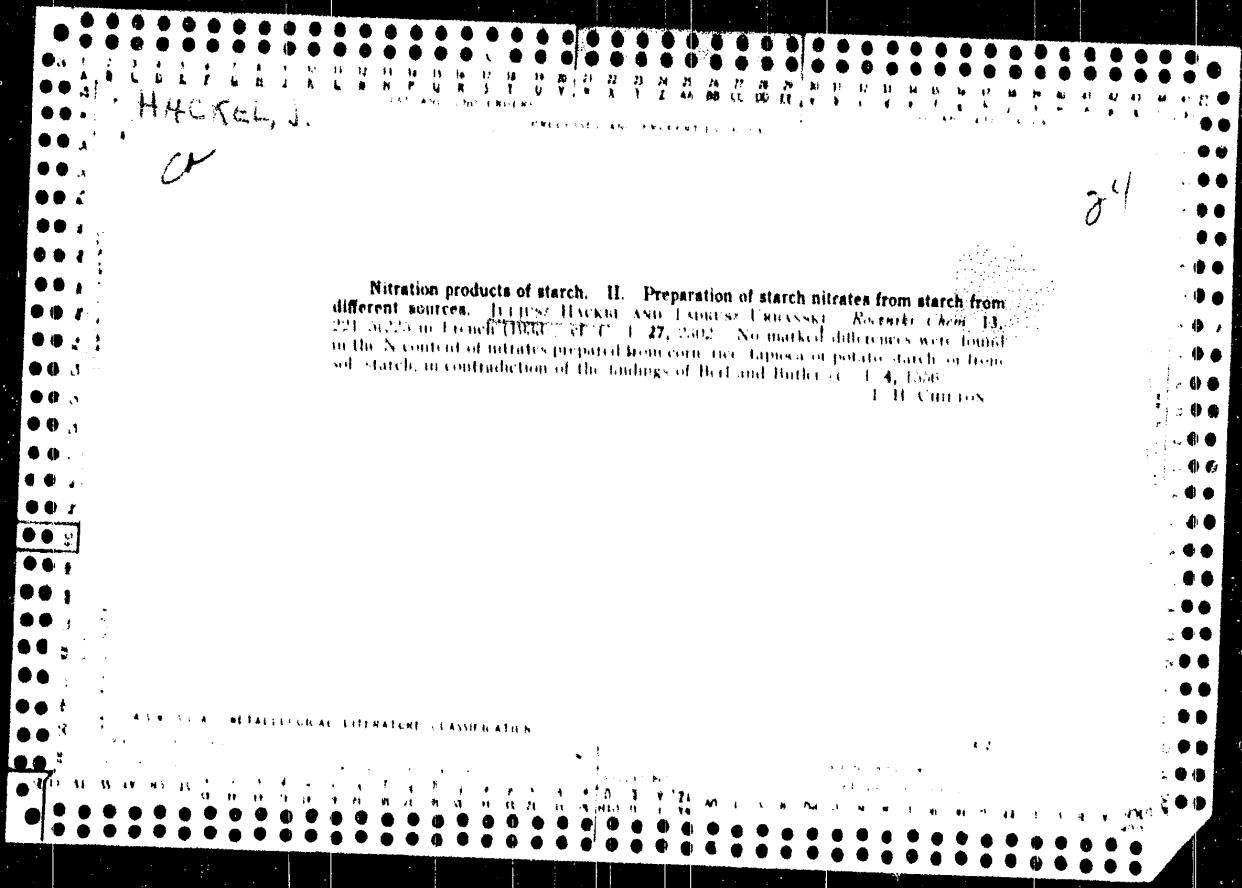
133033 HEP ONY ORT

133031 BOWERY

133032 ONY ONY 131

TO SA WA AV NO 35

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



HACKEL, J.

[Handwritten signature]

84

Nitration products of starch. II. Preparation of starch nitrates from starch from different sources. J. H. HACKEL AND J. BRZEZINSKI. *Roczniki Chem.* 13, 221-223 in French (1938) (C.A.B. Int'l 27, 2502). No marked differences were found in the N content of nitrates prepared from corn, rice, tapioca or potato starch or from sol. starch, in contradiction of the findings of Bell and Butler (C.A.B. Int'l 4, 1558). I. H. CUMMINS.

METEOROLOGICAL LITERATURE CLASSIFICATION

24

HACKEL, J.

Nitration products of starch. 1. Preparation of starch nitrates from potato starch.
JULIUSZ HACKEL AND TADRUSZ URBANSKI. Roczniki Chem. 12, 276-97 (in French 296-7) (1932).---In nitrating potato starch with HNO₃ the following conclusions are drawn: An increase of the acid concn. causes an increase of the N content and of the viscosity of the nitrates. Stabilizing boiling of the nitrates has a detrimental effect inducing denitration and an increase of the soly. in EtOH. The N content increases with increasing amt. of HNO₃ used. A rise of the temp. from 0° causes a lowering of the N content, of the yield and of the viscosity of the nitrates, accompanied by an increase of the EtOH soly. The changes are probably due to secondary oxidation reactions induced by the rise in temp. With increasing time of esterification the N content of the product rises rapidly at first, and then the increase becomes steadily smaller. The increase of the nitration period favors also the above secondary reactions, causing a drop of the yield, of the N content and of the viscosity of the product. Starch nitrates pptd. by H₂O show a better chem. stability than those pptd. by H₂SO₄. In nitrating starch with HNO₃-H₂SO₄-H₂O mixts. the best yield is obtained with mixts. containing equimolar amts. of H₂SO₄ and H₂O. Such mixts. showing a max. partial pressure of HNO₃ vapors exhibit a max. nitrifying power, and behave here in the same manner as in the nitration of cellulose. Mixts. poor in H₂SO₄ differ in their effect on starch from that on cellulose insofar as nitrated starch is probably sol. in them. J. WIRREBLAK

ASSOCIATED METALLURGICAL LITERATURE CLASSIFICATION

MAGHULESCHU, T.

Calculating the Volume of Exploratory Drilling on the Basis of the Reserve Increase of "Oil Well" Departments. Petrol Ci Care (Petroleum and Gases), #3:125: Mar '55

HACISKI, Eugeniusz, mgr inż.

Prototype of the vessel B-516 M.S. "Domeyko" and its first
mercantile voyage. Bud okretowe Warszawa 8 no.7:248-250
Jl '63.

1. Centralne Biuro Konstrukcji Okretowych nr 1, Gdansk.

HACISKI, Eugeniusz, mgr inż.

General cargo motor vessel, I. Domeyko. Bud. okretowe Warszawa 8
no.1:8-10 Ja '63.

1. Centralne Biuro Konstrukcji Okretowych Nr 1, Gdansk.

CZECHOSLOVAKIA

HACIK, T; Endocrinological Institute, Slovak Academy of Sciences,
(Endokrinologický Ústav SAV), Bratislava.

"The Effect of a Single Testosterone Administration at an Early
Postnatal Period on the Function of Adrenal Glands in Rats."

Prague, Ceskoslovenska Fysiologie, Vol 15, No 2, Feb 66, pp 118-121.

Abstract: Sexual hormones act upon sex organs through the sex
center located in the hypothalamus in the brain. 1 mg of testos-
terone propionate was administered to rats aged 2 to 5 days;
the animals were studied when 120 days old. In females the
weight of adrenal glands was slightly increased, production of
corticosterone by adrenal glands was increased substantially;
no differences were noted in males. 5 Western references.
Submitted at "16 Days of Physiology" at Kosice, 28 Sep 65.

STARHA, L.; JACIK, T.

CSSR

Endocrinological Research Institute in Prague (Vyskumny ustav endokrinologiciky), director: docent K. Bilink, MD; Endocrinological Institute of SAV in Bratislava (Endokrinologiciky Ustav SAV); director: J. Podoba, MD, C Sc.

Bratislava, Bratislavsko Lekarske Listy, No 6, 1963, pp 330-334

"A Routine Test-Tube Method for the Determination of Urinary 17-Ketosteroids"

(2)

HACIK, T.

Pathogenesis of congenital adrenal hyperplasia. Bratisl. lek. listy
42 no.8:507-511 '62.

1. Z Endokrinologickeho ustavu Slovenskej akademie vied v Bratislave,
riaditel MUDr. J. Podoba, C. Sc.

(ADRENAL CORTEX dis)

HACIK, T.

Determination of pregnantriol in urine. Bratisl. Lek. Listy 42 no.3:
135-140 '62.

1. Z Endokrinologickeho ustavu Slovenskej akademie vied v Bratislave,
riaditel MUDr. J. Podoba, C. Sc.
(PROGESTATIONAL HORMONES)

IZAKOVIC, V.; HACIK, T.

Congenital adrenogenital syndrome in 2 sisters born from consanguinous parents. Bratisl. lek. listy 44 no.2:113-115 31 J1 '64.

1. Katedra vnutorneho lekarstva Slovenskeho ustavu pre doskolovanie lekarov v Trencine (veduci doc. MUDr. D. Dieska) a Endokrinologicky ustav Slovenskej akademie vied v Bratislave (riaditel MUDr. J. Podoba, C. Sc.).

HAGIK, T.

1014
CSO: 2000-R

7. "Spina Dorsi, Vesical Relations at Approx. 3rd Cervical Vertebra" by J. HAGIK and S. YAMAKI, Journal of Anatomical Society of Japan (1954), pp. 1-10. (English summary.)
8. "The Physiology of Organized Animals" by J. HAGIK, Journal of Anatomical Society of Japan (1954), pp. 1-10. (English summary.)
9. "The Physiology of Organized Animals" by J. HAGIK, Journal of Anatomical Society of Japan (1954), pp. 1-10. (English summary.)
10. "The Physiology of Organized Animals" by J. HAGIK, Journal of Anatomical Society of Japan (1954), pp. 1-10. (English summary.)

LUPASCU, Gh., prof.; HACIG, Alice, biolog; TINTAREANU, Justina, dr.;
SOLOMON, Paula, biolog; SMOLINSKI, M., dr.

Diagnostic methods in trichinellosis. Value of immunobiological
diagnosis in the study of apparent foci in the Rumanian People's
Republic. Microbiologia (Bucur.) 10 no.3:233-244 My-Je '65.

LUPASCO, Gh.; SORESCO, Angela; PANAITESCO, D.; IACIG, Alice; SOLOMON, Paula

Research on the role of underground irrigation in the prevention of pollution of the soil of the irrigated crops with geohelminth eggs. Arch. Roum. path. exp. microbiol. 23 no.4:889-898 D 1964.

1. Travail de l'Institut "Dr. I. Cantacuzino", Section d'Helminthologie. Submitted May 6, 1964.

DUPASCO, Gh.; HACIG, Alice; SOLOMON, Paula; TINTAREANI, Justina

Research on the persistence of certain immunobiological reactions in *Trichinella spiralis* infections. Arch. Roum. path. exp. microbiol. 23 no.4:883-888 D 1964.

1. Travail de l'Institut "Dr. I. Cantacuzino", Section d'Helminthologie. Submitted May 18, 1964.

IUPASCO, Gh.; SOICMON, Paula; HACIG, Alice

Contribution to the study of experimental infection with
Trichinella spiralis. Arch. Roum. path. exp. microbiol. 23
no.4:869-876 D 1964.

1. Travail de l'Institut "Dr. I. Cantacuzino", Service d'
Helminthologie. Submitted January 11, 1964.

LUPASCU, Gh., prof.; SORESCU, Angela, dr.; PALAITESCU, E., dr.; HACIG, Alice,
biology; SOLOMON, ..., biolog.

Investigations of the role of underground irrigation in the pre-
vention of the pollution, with geohelminth eggs, of the soil
of the irrigated cultivated land. Microbiologia (Bucur.) 9 no.2s
196-195 Mysle '64

1. Lucrare efectuala in sectia de helminologie si parazitologie
microbiologie, parazitologie si epidemiologie "Dr. Botacuzino",
Bucuresti.

LUPASCO, Gh.; SOLOMON, Paula; HACIG, Alice; CIPLEA, Al. Gh.; CIUREA, C.;
IANCO, Larissa.

Research on the role of the reticulo-endothelial system in immunity
in experimental trichinosis. Arch. Roum. path. exp. microbiol. 20
no.3:337-356 S '61.

1. Travail de l'Institut "Dr I. Cantacuzino" Laboratoires
d'Helminthologie, Histopathologie et Chimie parasitaire.
(RETICULOENDOTHELIAL SYSTEM physiology)
(TRICHINOSIS experimental) (IMMUNITY)

HACIG, Alice

SURNAME (in caps); Given Names

Country: Rumania

Academic Degrees:

Affiliation:

Source: Bucharest, Microbiologie, Parazitologie, Epidemiologie, Vol VI,
No 5, Sep-Oct 1961, pp 439-454.

Data: "The Spread of Geohelminthiasis Through the Intermediary of
Irrigated Plantations."

Authors:

LUPASCU, G., -Prof.- Department of Parazitology of F.P.S.M.F.]
(Catedra de Parazitologie F.P.S.M.F.).

SORESCU, Angela, -Dr.- Department of Parazitology of F.P.S. M.F.
PANAITESCU, D., -Dr.-, Department of Parazitology of F.P.S.M.F.
ANGELESCU, C., -Dr.-, Central "Sanepid" of the Capital (Sanepidul
Central al Capitalei).

HACIG, Alice, Helminthology Section of the "Dr. I. Cantacuzino"
Institute (Sectia de Helmintologie a Institutului "Dr. I. Can-
tacuzino").

SOLOMON, Paula, Helminthology Section of the "Dr. I. Cantacuzino"
Institute.

DIASCU, Gh., prof.; HASIU, Alina, doctor; DR. MATEI, Maria, doctor.

Efficiency of some methods of immobilization of the
Trichinella spiralis larvae. *Microbiologia (Romania)*
no. 5:231-234, Hy-Je '64.

1. Inzarcare efectuată în Sistem de laborator al Institutului
de microbiologie, parazitologie și epizootologie "I. L. Caraculeni",
București. Membru corespondent al Academiei Republicii România
România (For. Iupason).

NITULESCU, V.; POZSGI, N.; SORESCU, A.; PANAITESCU, D.; HACIG, A.;
SOLOMON, P.

Problems connected with helminthological research in mining
regions. Stud. cercet. inframicrobiol., Bucur. 7 no.1-2:
193-202 Jan-June 56.

(HELMINTH INFECTIONS, epidemiol.
in mining regions of Rumania)

(MINING
helminth infect. in miners of Rumania, epidemiol.)

1955-1956
SORESCU, A.; PANAITESCU, D.; SOLOMON, P.; HACIG, A.; BELLU, C.

Helminthological studies in the Ostrov quarter of Bucharest.
Stud. cercet. inframicrobiol., Bucur. 6 no.3-4:605-619 July-
Dec. 1955.

(HELMINTH INFECTIONS, epidemiol.

in Rumania, distribution in Ostrov quarter of Bucharest)

HACHOVA, E. ~~E.~~

Country : CZECHOSLOVAKIA
Category: Organic Chemistry. Natural Compounds and Their
Synthetic Analogues G
Abs Jour: RZhKhim., No. 17, 1959, No. 61026
Author : Protiva, M.; Jilek, J.O.; Hachova, Ye.; Kovak, L.*
Inst : -
Title : Synthetic Models of Alkaloids Lowering Blood
Pressure. I. 1-alkyl-1, 2, 3, 4-Tetrahydroiso-
quinans. II. Simple Models of "Reserpine"
With Cyclohexane Rings E.
Orig Pub: Collect. Czechosl. Chem. Commun., 1959, 24,
No 1, 74-82, 83-92
Abstract: See Ref. Zhur-Khizdya, 1958, No 18, 61101,
No 22, 741-67
*Vejdelek, Z.J.; Adlerova, E. II. Protiva, M.;
Jilek, J.O.; Hach, V.; Adlerova, E.; Mychalyszyn, V.
Card : 1/1

HACHOVA, E.

Synthetische Arzneimittel und Naturstoffe als Arzneimittel Fortschritte in den Jahren 1957 and 1958

Von V. HACK, M. BOROVIČKA und E. HACHOVA

Herrn Dr. V. Treka sind wir fuer wertvolle Ratschlaege und Herrn Ing. V. Mychajlyszyn (beide Forschungsinstitut fuer Pharmazie und Biochemie, Prag) fuer seine Mithilfe bei der Uebersetzung einiger fremdsprachiger Arbeiten zu Dank verpflichtet.

Eingegangen am 10. Juli 1959

Dr. V. Hach, Praha XV (CSR), Branicka 121

SO: PHARMAZIE, Dec 59, p. 662 and 678, Uncl.

Card 10/11

... J. Chem. Soc., 1946, ^{hydrogenation}

CZECHOSLOVAKIA / Organic Chemistry, Natural Substances and Their Synthetic Analogues. G

Abs Jour: Ref Zhur-Khimiya, No 18, 1958, 61101.

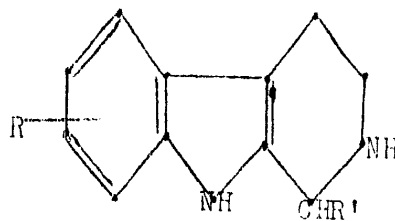
Abstract: 621); MS - melting point 210 to 211° (from alcohol-acetone).

Card 11/11

CZECHOSLOVAKIA / Organic Chemistry. Natural Substances G
and Their Synthetic Analogues.

Abs Jour: Ref Zhur-Khimiya, No 18, 1958, 61101.

Abstract:



yield 79%. 7-methoxytryptamide of PNA (XIII),
melting point 101 to 102° (from aqueous CH₃OH),

Card 6/11

Card 3/11

60

CZECHOSLOVAKIA / Organic Chemistry. Natural Substances G
and Their Synthetic Analogues.

Abs Jour: Ref Zhur-Khimiya, No 18, 1958, 61101.

Abstract: corresponding acid, and c/ of the corresponding I and hydrochloride of the corresponding acid in C_6H_6 in the presence of aqueous NaOH at about 20° . 5-methoxytryptamine of PNA (VI), melting point 117° (from CH_3OH), was prepared of IV according to the method a, yielded 80%. Triptamide of 4-methoxy-PNA (VII), melting point 155 to 156° (CH_3OH), was prepared of I and methoxy-PNA by the method b, yield 46%. Triptamide of α -phenylisobutyric acid (VIII), melting point 137 to 138° (from benzene), was prepared of I and IV by the method c, yield 91%. Triptamide of PNA (IX), melt-

Card 4/11

HIGH ERIKA

SECRET
TOP SECRET
EXCLUDED FROM AUTOMATIC DOWNGRADING AND
DECLASSIFICATION

ILLEGIBLE

HACHLER, E.

The number of water birds on the Lednice ponds in terms of the international census. p. 59. (Ochrana Prirody, Vol. 12, No. 2, Mar 1957, Praha, Czechoslovakia)

SO: Monthly List of East European Accessions (MEAL) LC, Vol. 6, No. 8, Aug 1957. Uncl.