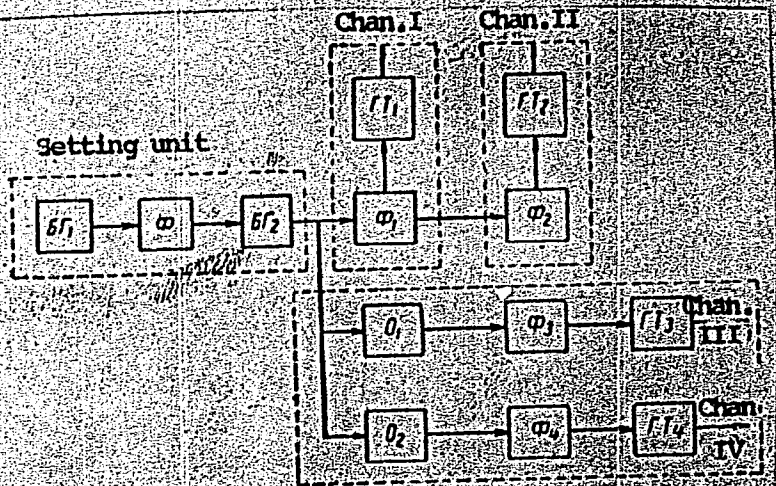


L. 34887-65

ACCESSION NR: AT5004676

ENCLOSURE: 01



CT - current generator
BT - blocking generator
P - pulse shapling netw.
O - univibrator

Fig. 1. Block diagram of 4-channel current generator

Card 4/4

S/578/61/000/002/002/002
E032/E514

1.6150

AUTHORS: Filonov V S and Sel'dyakov, Yu.P.
TITLE: A detector for intermediate-energy neutrons
PERIODICAL: Zhernov, V.S. and Shirshov, D.P., eds. Uzly novoy apparatury dlya issledovaniya yadernykh izlucheni; nauchno-tekhnicheskiy sbornik. no.2. Moscow, Gosatomizdat, 1961, pp.107-110

TEXT: The authors have used a perspex phosphor (3.7 cm thick, 8 cm in diameter, mounted on a $\Phi 3Y-24$ (FEU-24) photo-multiplier). The phosphor contained 5 g of a substance referred to as T-1 per 240 g of perspex. The T-1 is said to have been developed by T. V. Timofeyeva and S. P. Khormushko (Ref.1: Izv. AN SSSR, seriya fiz., 22, No.1, 14-20, 1958; Ref.2: Atomnaya energiya, 3, No.3, 1958) and is being manufactured by the "Red Chemist" factory. Fig.1 shows the efficiency of the detector as a function of the neutron energy (eV). It was found that by discriminating against a γ -ray background of 1000 μ r/sec (Co^{60} γ -rays) the efficiency was reduced by a factor of 4-5. A change in the energy of the γ -rays did not have a great effect on the

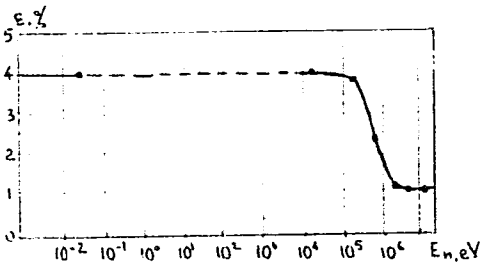
Card 1/2

A. detector for intermediate ...

S/578/61/000/002/002/002
E032/E514

neutron counting rate. Fig.3 shows the neutron efficiency as a function of the energy of the γ -rays which were discriminated against. Acknowledgments are expressed to I. V. Timofeyeva for advice on the phosphor, S. N. Baykalov, M. V. Blinov, A. I. Seryakov and A. S. Solov'yev for carrying out some of the measurements, V. V. Matveyev and M. N. Pchel'nikov for assistance in this work and to N. N. Prihodchenko for developing the detectors. There are 3 figures and 4 Soviet references.

✓
c



Card 2/2

Fig. 1

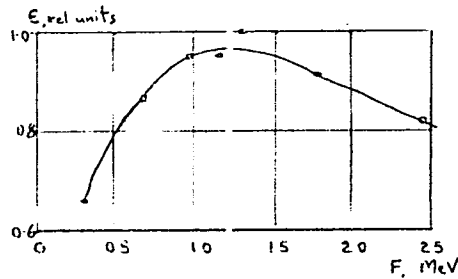


Fig. 3

L 32062-66 EWT(m)/T IJP(c)

ACC NR: AR6016157

SOURCE CODE: UR 0058/65/000/011/A045/A045

AUTHOR: Matveyev, V. V.; Sel'dyakov, Yu. P.

TITLE: Use of semiconductor detectors for nuclear radiation in commercially produced apparatus

SOURCE: Ref. zh. Fizika, Abs. 11A390

REF SOURCE: Tr. Soyuzn. n.-i. in-ta priborostr., vyp. 1, 1964, 14-22

TOPIC TAGS: radiation detector, semiconductor device, dosimetry, radiometry, electronic equipment

ABSTRACT: The authors present a brief review of specific characteristics of semiconductor detectors (SD) for nuclear radiation. Some of the most frequent applications of SD for purposes of dosimetry, radiometry, and spectrometry of nuclear radiation are described. It is noted that in many scientific research laboratories in the SSSR work is being done on the development and preparation for commercial production of SD of different types. A tendency is already observed at present to use different designs of SD, and these designs depend in turn on the dimensions of the sensitive area of the SD. It is emphasized in this connection that it is essential to standardize the SD with respect to design, rated dimensions, marking of the electric and spectrometric parameters, and introduction of unified methods of determining these parameters. Possible ways of standardizing the SD are considered. It is noted further that the extensive use of SD in experimental and nuclear physics and industry is made possible

Card 1/2

L 32062-66

ACC NR: AR6016157

by availability of commercially produced suitable electronic apparatus needed for the amplification and processing of the pulse received from the SD. The developed electronic apparatus also is in need of standardization. L. S. [Translation of abstract]

SUB CODE: 09

Card 2/2

YUGOSLAVIA

Mitar MITROVIC, Zivota GJORGJEVIC and Adam SELEA, Department of Surgery of City Hospital (Hirursko odeljenje Gradske bolnice), Head (Nacelnik) Prof Dr Mitar MITROVIC, Belgrade.

"Coincidence of Acute Appendicitis and Empyema of Ovarian Dermoid Cyst During Pregnancy."

Belgrade, Srpski Arhiv za Celokupno Lekarstvo, Vol 91, No 1, Jan 63; pp 91-94.

abstract [German summary modified]: Interesting case report in woman aged 27 in 5th month of pregnancy. Differential diagnostic problems were solved by laparotomy. Appendectomy, right salpingectomy brought about uneventful recovery. Photograph of specimen. One Yugoslav and 7 Western references.

1/.

MITROVIC, Mitar; DORDEVIC, Zivota; SELEA, Adam

The coincidence of acute appendicitis and suppurative dermoid cyst of the ovary in pregnancy. Srpski arh. delok. lek. 91 no.1:91-94 Ja '63.

1. Hirurško odeljenje Gradske bolnice u Beogradu Nacelnik:
prof. dr. Mitar Mitrovic.

(APPENDICITIS) (TERATOID TUMOR)
(OVARIAN NEOPLASMS)
(PREGNANCY COMPLICATIONS)

S

SELEANU, M.; NICOLESCU, G.

Spinal barbotage in the treatment of arteritis. Rumanian med. rev.
no.2:81-84 '62.

(ARTERITIS)

(SPINAL PUNCTURE)

SELECHIA I.

Priscol v lieche tazkej myopia. [Priscol in the treatment of
severa myopia] Cesk. ofth. 7:3 1951 p. 209-11.

1. Of the Eye Clinic of Slovak University Branch in Kosice
(Head-Dozent J. Pajtas, M.D.).

SELECKA, I.

Statistical study of burns and corrosions of the eye, 1920-1951. Cesk.
ofth. 8 no.6:392-394 Dec 1952. (GIMI 23:4)

1. Of the Eye Clinic (Head--Docent Jozef Pajtas, M.D.) of Slovak Univer-
sity Branch in Kosice.

SELECKA, Irena

Carcinomatous degeneration of the pterygium. Cesk.ofth. 11 no.4-5:
293-295 1955

1. Z kliniky pre choroby ocne UK v Kosiciach, prednosta prof.
MUDr J.Pajtas.

(PTERYGIUM, pathology
carinomatous degen.)

CZECHOSLOVAKIA / General Problems of Pathology. Allergy. U

Ab: Jour: Ref Zhur-Biol., No 9, 1958, 41907.

Author : ~~Selecka, I.~~
Inst : Not given.
Title : Allergic Edema of the Eyelids Following Application of Diocaine.

Orig Pub: Ceskosl. ofthalmol., 1957, 13, No 3, 201-204.

Abstract: Following application of diocaine (I) drops in the eyes of a woman, 63 years old, an acute edema of the eyelids and conjunctivae was noted, associated with a profuse secretion containing a large number of eosinophiles. It is the opinion of the author that I does not possess allergenic properties, since the allergic reaction appeared following a first application of I. Women with menopausal disfunction are sensitive to I. Desensitization to I (2-4% I) is unstable.

Card 1/1

SELECKA, KRYSZYNA

SELECKA, Krystyna (Warszawa, Nowy Swiat 41 a m. 62.)

A case of arteritis nodosa diagnosed during life. Polski tygod. lek.
12 no.40:1541-1543 7 Oct 57.

1. Z III Kliniki Chorob Wewnętrznych A. M. w Warszawie; kierownik: prof.
med. J. Wegierko.

(PERIARTERITIS NODOSA, diag.
pattern of symptoms)

SELECKI, J.

"Influence of the ingredients CaO and CaCl₂ on the process of ceramic mass drying."
p. 93. (MATERIALY BUDOWLANE, Vol. 8, no. 3, Mar. 1953, Warszawa, Poland)

SO: Monthly List of East European Accessions, L. C., Vol. 3, No. 5, May 1954, Uncl.

SELECKI, A.

"Quantitative Method of Determining the Shape of Sand Grains Used for the Production of Sandlime Building Elements." p. 137 (Materialy Budowlane, Vol. 9, No. 5, May, 1954, Warszawa)

SO: Monthly List of East European Accessions, Vol. 3, No.6, Library of Congress, June, 1954, Uncl.

SELECK

A

702

702. New data for planning the drying process of shapes having vertical walls. A. SELECKI (Saklo i Ceramika, 8, 210, 1956). In Polish. Reviewed. Equations and formulae for the coefficient of penetration of water in a body in a stable temperature application of these formulae is in the speed of drying is still un- known. The influence of spatial situation, certain. Most of the paper is based on another by the geometric situation in the specific case of drying of a body during drying at a constant speed were investigated, so placed that the long walls are parallel to the direction of flow. A formula is given by which the drying speed of the long walls in the first drying stage. Observations are made on limitations of the formulae data given, coefficients have been derived for the usual 240 x 120 x 65 mm bricks for drying.

Previous research on drying of shapes having vertical walls. A. SELECKI (Saklo i Ceramika, 8, 210, 1956). In Polish. Reviewed. Equations and formulae for the coefficient of penetration of water in a body in a stable temperature application of these formulae is in the speed of drying is still un- known. The influence of spatial situation, certain. Most of the paper is based on another by the geometric situation in the specific case of drying of a body during drying at a constant speed were investigated, so placed that the long walls are parallel to the direction of flow. A formula is given by which the drying speed of the long walls in the first drying stage. Observations are made on limitations of the formulae data given, coefficients have been derived for the usual 240 x 120 x 65 mm bricks for drying.

PM

SELECKI, A.

POLAND/Chemical Technology, Chemical Products and Their
Application, Part 3. - Food Industry.

H-28

Abs Jour: Referat. Zhurnal Khimiya, No 10, 1953, 31-208.

Author : J. Ciborowski, B. Młodziński, J. Rosztak, A. Selecki.

Inst : Not given.

Title : Drying in Suspended State.

Orig Pub: Przem. spożywczy, 1957, 11, 6, 247-253.

Abstract: A description of a drier and of rye drying experiments
with a laboratory and a pilot-plant dryer is presented.
The experiments confirmed the expediency of drying in
suspended state.

Card : 1/1

END

27

SELECKI, A

POLAND / Chemical Technology, Chemical Products and Their
Application. Chemical Engineering.

H-2

Abs Jour : Ref Zhur - Khimiya, No 5, 1959, No. 15600

Author : Ciborowski, J.; Selecki, A.

Inst : Not given

Title : Certain Data on the Evaporation of Liquids from Particles
of the Pseudo-Dilute Layer

Orig Pub : Chem. stoscw., 1958, 2, No 2, 135-145

Abstract : Experiments devoted to the determination of evaporation
rates were conducted in a 70 mm diameter glass column,
packed with moistened ceramic balls of 0.71 mm diameter,
with hot air passing through this column, at a variable
rate (1760-2650 kg/m²/hr.), at a temperature ranging from
91° to 162°, and at a variable rate of spraying that ranged
11 to 208 kg/m²/hr. It was established that low rates of
spraying do not affect the pseudo-dilute layer. A critical

Card 1/2

POLAND / Chemical Technology, Chemical Products and Their
Application. Chemical Engineering

H-2

APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R001547720002-3"

Abs Jour : Ref Zhur - Khimiya, No 5, 1959, No. 15600

spray density was determined that suppressed the process.
Feasibility of utilization of liquid vaporization from
particles contained in the pseudo-dilute layer has
been indicated for the air humidification applications. --
S. Globov

Card 2/2

H-2

Selecki, A.

Separation of isotopes in ultracentrifuges. p. 13.

NUKLEONIKA. (Polska Akademia Nauk. Komitet do Spraw Pokojowego Wykorzystania
Energii Jądrowej) Warszawa, Vol. 4, no. 1, 1958.

Handwritten mark

Monthly List of European Accession (EEA) IC, Vol. 8, no. 7, July 1959.

Uncl.

POLAND/Nuclear Physics - Installations and Instruments.
Methods of Measurement and Research

C

Abs Jour : Ref Zhur Fizika, No 10, 1959, 2197C
Author : Selecki, Anatol
Inst : -
Title : Separation of Isotopes in Ultracentrifuges
Orig Pub : Nukleonika, 1959, No 1, 13-33
Abstract. : No abstract.

Card 1/1

- 11 -

0/051/50/000,005/000/000

11310

... ..

... ..

... ..

The construction of an I - x diagram for humid hydrogen is described
for a constant pressure of 101.325 kPa in the temperature range of from

0 to 70°C and a humidity of 100.0-1.0 g H₂O per kg of H₂. The diagram is

shown. The following equations were applied for the calculation:

$I = I_{H_2} + I_{H_2O} \cdot x$ (1); $\lambda = (M_{H_2O}/M_{H_2}) \cdot (p_{sat} \cdot (700 - p_{sat}))$

$= 99 p_{sat} \cdot (700 - p_{sat})$ (2), where M_{H_2O} and M_{H_2} are the molecular weights.

$\alpha_{H_2} = \alpha_{H_2} - \alpha_{H_2O}$ (3), $\alpha_{H_2} = (Sc/r)^{2/3} \cdot \alpha_x$ (4), where Sc is the Schmidt

number and r is the Prandtl number. Pr was assumed as 0.7.

$\alpha_x = \alpha_{H_2} \cdot (1 - x) = (\alpha_{H_2}/r) \cdot (t - t_{sat}) \cdot (Sc/r)^{2/3}$ (5) Sc was calculated

Card 1/4

The first term in the right hand side of equation (6) is

$$\frac{1}{M} \left(\frac{m_1}{M_1} + \frac{m_2}{M_2} + \frac{m_3}{M_3} \right) \frac{RT}{p} \left(\frac{p}{p_0} \right)^{\frac{1}{\gamma}}$$

where $k = \left(\frac{m_1}{M_1} \frac{M_1}{M_2} + \frac{m_2}{M_2} \frac{M_2}{M_3} + \frac{m_3}{M_3} \frac{M_3}{M_4} \right) \left(\frac{M_1}{M_2} + \frac{M_2}{M_3} + \frac{M_3}{M_4} \right)$ and $\frac{m_1}{M_1} \frac{M_1}{M_2} + \frac{m_2}{M_2} \frac{M_2}{M_3} + \frac{m_3}{M_3} \frac{M_3}{M_4} = 0.11$ and $\frac{M_1}{M_2} + \frac{M_2}{M_3} + \frac{M_3}{M_4} = 1.0$ (6).

The second term in the right hand side of equation (6) is calculated according to equation (7)

$$p = p_0 \left(\frac{p_0 + C}{p + C} \right) \left(\frac{T}{T_0} \right)^{\frac{1}{\gamma}} \quad (7)$$

where p_0 is the initial pressure, $C = 72$ mm Hg, $T_0 = 273$ K, $\gamma = 1.4$, $\frac{p_0 + C}{p + C} = 1.0$, $\frac{T}{T_0} = 1.0$, and $\frac{p_0 + C}{p + C} = 1.0$. The value of γ is calculated according to equation (8)

$$\gamma = \frac{1}{\frac{1}{\gamma_0} + \frac{1}{\gamma_1} + \frac{1}{\gamma_2} + \frac{1}{\gamma_3}} \quad (8)$$

where γ_0 is the adiabatic exponent, $\gamma_1 = 1.4$, $\gamma_2 = 1.4$, and $\gamma_3 = 1.4$. The value of γ_0 was determined experimentally. For practical application of the data it is recommended to reduce the temperature for low humidity values far enough to obtain spectrometer differences of 5-7°C, because the accuracy is the more accurate. The following symbols apply to the symbols mentioned: C = saturation constant; \bar{c}_p = mean

specific heat for constant pressure, kcal/°C.k, c_p = specific heat of the gas

33021 R
S/064/60/000/005/006/000
B101/BAC6

The I x diagram for the system

mixture, related to 1 kg dry H₂, kcal/°C kg H₂ (dry); D = diffusion coefficient, m²/sec; g = gravitational constant, m/sec²; x = humidity content, gH₂O per kg H₂; i = enthalpy, kcal/kg; I = enthalpy of the humid mixture related to 1 kg absolutely dry hydrogen; K_g = constant of mass action related to the difference Δx, kg/m² sec; n = molar part; p = partial pressure of the water vapor mm HG; P_{sat} = pressure of the saturated water vapor, mm HG; r = latent heat of vaporization, kcal/kg; t = temperature, °C; T_c = critical temperature, °K; V = content by volume of water in the mixture, %; α = heat transfer coefficient, kcal/m².°C-sec; γ = specific gravity, kg/m³; μ = viscosity, kg/m-sec; φ = relative humidity, %; the index w is related to the indication of the wet thermometer. There are 1 figure, 1 table, and 2 non-Soviet bloc references. The 2 references to English-language publications read as follows. T K Sherwood, Absorption and Extraction, McGraw-Hill Co., London, 1937; International Critical Tables, McGraw-Hill Co., N. Y., 1929, p. 5. 62

X

1/14

The I - x diagram for the system

System
S/064/60,000/005/006/009
B101/B206

ASSOCIATED Department of Nuclear Chemistry, Warsaw University

Fig. The I - x diagram for the system water vapor - hydrogen at 760 mm Hg

1014/0-1

SELETSKI, Anatol [Selecki, A.]; BLYUM, Aleksander [Blum, A.]

I - x diagram for the system water vapor - hydrogen. Khim.prom.
no.5:411-413 J1-Ag '60. (MIRA 13:9)

1. Kafedra yadernoy khimii Varshavskogo universiteta.
(Water vapor) (Hydrogen)

24131

21.4100 5.2430

P/046/60/005/009/002/006
D241/D302

AUTHOR: Selecki, Anatol

TITLE: Deuterium exchange reaction between hydrogen and steam

PERIODICAL: Nukleonika, v. 5, no. 9, 1960, 513 - 520

TEXT: The effects of some hydrodynamic factors on the kinetics of the above reaction catalyzed by metallic Ni supported on chromia, are described and discussed. Different methods of studying the kinetics of catalytic reactions are mentioned (Ref. 9: G.K. Boreskov, M.G. Slin'ko, Khim. Prom., No. 19 (1955)). The dynamic flow method was used by the present author, to study the reaction $HD + H_2O$ (steam) \rightleftharpoons $H_2 + HDO$ (steam) in relation to the rate of flow of the reacting mixture, grain size and thickness of the catalyst layer, and the temperature. The rigorous kinetic equation assuming a reaction mechanism based on association is:

Card 1/6

24111

Deuterium exchange reaction...

P/046/60/005/009/002/006
D241/D302

X

$$k = \frac{1}{t\sqrt{\Delta}} \cdot \ln \left(\frac{[\text{HDO}]_{\text{initial}} - [\text{HDO}]_{\text{equilibrium}}}{[\text{HDO}]_{\text{final}} - [\text{HDO}]_{\text{equilibrium}}} \right) \left(\frac{[\text{HDO}]_{\text{final}} + [\text{HDO}]_{\text{equil.}} - \frac{B}{K}}{[\text{HDO}]_{\text{initial}} + [\text{HDO}]_{\text{equil.}} - \frac{B}{A}} \right) \quad (1)$$

where k is the velocity constant, $\Delta = B^2 - 4AC$, $A = K - 1$,
 $B = N(K-1) + \frac{K+\lambda}{\lambda+1}$, $C = \frac{KN}{\lambda+1}$, (K is the equilibrium constant, N
 the concentration of deuterium in the system and λ the ratio
 vol. H_2) and t is the time of contact. When $N \rightarrow 0$ or $\lambda \rightarrow \infty$
 vol. steam

i.e. $C \rightarrow 0$, Eq. (1) may be expressed as

$$k = \frac{1}{tB} \cdot \ln \frac{[\text{HDO}]_{\text{initial}} - [\text{HDO}]_{\text{equil.}}}{[\text{HDO}]_{\text{final}} - [\text{HDO}]_{\text{equil.}}} \quad (2)$$

Card 2/6

24131

Deuterium exchange reaction...

P/O46/60/005/009/002/006
D241/D302

which represents a unimolecular reaction. The apparatus used is illustrated. Heavy water containing 4-5 at. % D and electrolytic 99.8% H₂ were used, the latter containing 0.015 at. % D. The catalyst was size-graded into 0.25-0.4, 0.4-0.5, 0.5-0.75 and 0.75-1.0 mm. fractions; its specific gravity (γ) was 4.45, apparent density (T_{app}) 2.32 and the bulk density (T_{bd}) 1.25-1.35 g/cc and the specific surface, measured by the BET method, was 49 m²/g. The mean pore size was 84 A.V. The range of reaction temperatures was limited by the activity of the catalyst and the need to prevent condensation of steam in the reactor. The following objections to the theoretical treatment of the reaction mechanism are listed (a). Assuming that no side reactions proceed (b) assuming a reaction mechanism based on association, (c) using concentrations rather than activities and (d) using the simplified Eq. (2) rather than (1). These objections are discussed and justified. An analysis of the hydrodynamic conditions of the system is given. Reynold's number is shown to lie between 0.42 and 11.1 indicating that the

Card 3/3

2434

Deuterium exchange reaction...

P/046/60/005/009/002/006
D241/D302

gas flow through the catalyst is not laminar. The concepts of Height of Transfer Units (HTU) Height of Reaction Units (HRU) and Height of Catalytic Units (HCU) introduced by Chilton and Colburn (Ref. 18: Ind. Engng. Chem. 27, 255 (1935)) are explained and used to show that the percentage mass transfer from the gas to the surface of the catalyst, given by $\frac{HTU}{HRU} \times 100$ is 0.22 - 1.14%.

From the above and the large value of the activation energy it is concluded that the reaction takes place in the internal diffusion zone. Efficiency of the catalyst, (η) is considered in relation to Thiele's modulus ϕ , given by $\phi = \frac{d_z}{2} \sqrt{\frac{K_{true}}{D_{ef}}}$ (16)

where d_z is the effective grain diameter, K_{true} is the true velocity constant, D_{ef} is the effective diffusion coefficient calculated from Knudsen's equation and is a structure factor (i.e. "labyrinth factor"), assumed to be 0.4. It is shown that

Card 4/4

Deuterium exchange reaction...

P/046/60/005/009/002/006
D241/D302

$\eta (= \frac{k}{k_{\text{true}}})$ obeys the relationship $\eta = \frac{\tanh \varphi}{\varphi}$ derived for (17)

a first order reaction. Values of η for various size fractions of the catalyst are given in tabulated form. Dependence of k on u is discussed with regard to the work of P.V. Danckwerts (Ref. 19: Chem. Engng. Sci., 2, 1(1953)) and is ascribed to a departure from streamlined flow, which varies with the time of contact. The author expresses his thanks to Dr. Professor I. Zlotowski, the Head of Katedra chemii jądrowej uniwersytetu Warszawskiego (Nuclear Chemistry Department Warsaw University), to Dr. Professor G.K. Boreskov, Head of the Department of Isotope Separation of the Technological Chemistry Institute imeni Mendelejev in Moscow and Corresponding Member of the AS USSR, to S. Nedumova an assistant professor at the above institute and to A.A. Dmitryeva and other workers of the Institute for their assistance. There are 8 figures, 1 table and 19 references: 8 Soviet-bloc and 11 non-Soviet-bloc. The references to the 4 most recent English-language publications read as follows: A.

Card 5/6

89146
P/016/60/014/012/001/002
B103/B207

5.4220

AUTHOR: Selecki, Anatol, Doctor, Adjunct

TITLE: On the deuterium exchange reaction between water and hydrogen.

PERIODICAL: Wiadomości chemiczne, v. 14, no. 12 (162), 1960, 741-758

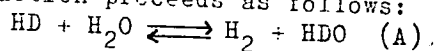
TEXT: The author does not mention own studies, but discusses the scientific and technical importance of the isotopic deuterium (D) exchange between hydrogen and water. He discusses the history of its discovery and the use of D (Refs. 1-4), especially as moderator of the critical mass of a nuclear reactor (Ref. 5), as well as to reduce the cost of the highly expensive isotopic enrichment of uranium. The importance of D will even increase in the future, i.e., in the study of the controlled thermonuclear reactions. Should energy one day be produced through these processes, D may become an important fuel, especially due to its practically unlimited deposits on the earth (order of magnitude: 10^{14} tons). In chemistry and also other fields of science D is of considerable importance as tagged atom. The author emphasizes the part played by the D exchange between hydrogen and

Card. 1/5

On the deuterium exchange reaction...

89146
P/016/60/014/012/001/002
B103/B207

water, especially in heavy water production (Ref. 14). At a low concentration of D, the reaction proceeds as follows:



It shows many characteristics of the isotopic exchange and changes only the D distribution between hydrogen and water. Reaction (A) differs, however, from the characteristic isotopic exchange reactions by the high value of the equilibrium constant which makes it similar to the normal chemical exchange reactions. The enrichment of D by means of the chemical exchange is either an independent procedure, or a supplementary process to the rectification of liquid hydrogen or water, or enrichment in an electrolytical cascade respectively. Most recently, the D exchange reaction became the basis of the so-called "dual temperature method" for the production of heavy water. The equilibrium constant of the reaction (A)

is (Ref. 33) $\log K_{\text{equ}} = \frac{928}{4.57 T} - 0.136$ (a), the Department of Isotope Separation of the Institut khimicheskoy tekhnologii im. Mendeleyeva (Institute of Chemical Technology imeni Mendeleev) in Moscow found a value of $\log K_{\text{equ}} = 930/4.57 T - 0.127$ (Ref. 35) (b). Since the equilibrium

X

Card 2/5

89146

P/016/60/014/012/001/002
B103/B207

On the deuterium exchange reaction...

constant is rather high below 100°C, heavy water is commercially produced at 70-80°C (Ref. 36). The equilibrium constants in the gas system and in the gas-liquid system do hardly differ. The total reaction of the D-exchange is, however, much more complex than it may be seen from reaction (A). The author concludes from computations that a low D concentration in hydrogen and water (up to about 5%), the reaction will proceed according to scheme (A), while at concentrations of over 95% the following scheme: $D_2 + HDO = HD + D_2O$ (G) holds. In the chapter on the exchange kinetics of D, the author stresses that this problem must be considered to be in accordance with the general laws of the kinetics of isotopic exchange. Deviations are, however, always possible as a result of the high equilibrium constant. The author summarizes the discussions of this topic he found in literature (Refs. 37-48, Y. M. Varshavskiy and S. Y. Vaysberg, Ref. 49) and states that, contrary to static problems, these questions have been hitherto not sufficiently treated. Also the discoveries made by H. S. Taylor (Ref. 52) and Barr (Ref. 55) which led to an acceleration of the reaction as well as suitable catalysts, had no result apart from the finding that the reaction is likely to occur in the range of diffusion. Post-war

Card 3/5

89146

P/016/60/014/C12/001/002
B103/B207

On the deuterium exchange reaction...

studies (Refs. 57, 58) on the activity of the catalysts did not change the view on the kinetic reaction mechanism. Finally, the author derives the equations of the rate constant of reaction. He proceeds from the equation $\frac{d[HDO]}{dt} = k_1 [HD][H_2O] - k_2 [H_2][HDO]$ (1), where k_1 and k_2 are the rate constants of reaction in both directions. $\frac{k_1}{k_2} = K_{equ}$ (4) is obtained herefrom.

Since the D concentration remains constant in the system in the course of reaction: $\frac{[HDO]}{[D]} + [HD] = N = \text{const.}$ and the ratio $H_2:H_2O$ remains also constant $\frac{[HDO]}{[H_2O]} + [H_2] = \lambda = \text{const.}$ After several conversions the author

arrives at the following equation:

$$k_2 = \frac{1}{t\sqrt{B^2 - 4AC}} \ln \frac{([HDO]_{init} - [HDO]_{equ})[\beta_{end}(B - \sqrt{B^2 - 4AC})]}{([HDO]_{end} - [HDO]_{equ})[\beta_{init}(B - \sqrt{B^2 - 4AC})]} \times \frac{-(B + \sqrt{B^2 - 4AC})}{-(B + \sqrt{B^2 - 4AC})} \quad (19).$$

For $N \rightarrow 0$ or $\lambda \rightarrow 0$, $C = \frac{K_{equ}N}{\lambda + 1} \rightarrow 0$, (19) is simplified:

Card 4/5

891146

On the deuterium exchange reaction...

P/016/60/014/012/001/002
B103/B207

$$k_2 = \frac{1}{tB} \ln \frac{[\text{HDO}]_{\text{init}} - [\text{HDO}]_{\text{equ}}}{[\text{HDO}]_{\text{end}} - [\text{HDO}]_{\text{equ}}} \quad (20). \quad \text{Explanations: } A = K_{\text{equ}} - 1,$$

$$B = N(K_{\text{equ}} - 1) + \frac{K_{\text{equ}} + \lambda}{\lambda + 1}, \quad C = \frac{K_{\text{equ}} N}{\lambda + 1}, \quad [\text{HDO}]_{\text{equ}} = \frac{B \pm \sqrt{\Delta}}{2A},$$

$$\beta_{\text{end}} = [\text{HDO}]_{\text{end}} / [\text{HDO}]_{\text{equ}}, \quad \beta_{\text{init}} = [\text{HDO}]_{\text{init}} / [\text{HDO}]_{\text{equ}}. \quad \text{Indices:}$$

init = initial, end = end, equ = equilibrium. The author mentions papers by S. Z. Roginskiy (Ref. 59) and thanks G. K. Boreskov, Professor, Doctor, Corresponding Member AS USSR, Head of the Department of Isotope Separation of the Institut khimicheskoy tekhnologii im. Mendeleyeva (Institute of Chemical Technology imeni Mendeleyev) in Moscow for valuable discussions and advice. There are 1 table and 61 references: 11 Soviet-bloc and 23 non-Soviet-bloc. ✓

ASSOCIATION: Katedra Chemii Jądrowej Uniwersytetu Warszawskiego
(Department of Nuclear Chemistry University Warsaw)

SUBMITTED: June 6, 1960

Card 5/5

SELECKI, Anatol

The effect of fluidization on the kinetics of the deuterium exchange reaction between water vapor and hydrogen. *Chemia stosow* ; no.2: 169-185 '61.

1. Katedra Chemii Jadrowej, Uniwersytet Warszawski [Kierownik Katedry: prof. dr. I. Zlotowski]

SELECKI, Antoni

Natural isotopes. Pt. 2. Basic properties of the distributing cascade.
Przem chem 40 no.9:500-505 S '61.

1. Katedra Chemii Jadrowej, Uniwersytet, Warszawa.

SELECKI, Anatol

Natural isotopes. Pt. 2. Basic properties of the distributing cascade.
Przem chem 40 no.10:560-564 0 '61.

1. Katedra Chemii Jadrowej, Uniwersytet, Warszawa.

SELECKI, Antoni

Natural isotopes. III. The distributing cascade. Some problems in engineering and economy. Przem chem 40 no.11:626-631 N '61.

1. Katedra Chemii Jadrowej, Uniwersytet, Warszawa.

SELECKI, Anatol

Evaluation of the expenses of enriching chlorine-37. Nukleonika
7 no.7/8:537-538 '62.

1. Instytut Badan Jadrowych, Polska Akademia Nauk, Warszawa.

SELECKI, A.

A scientific conference on problems of natural isotopes.
Przem chem 41 no.2:98 F '62.

SELECKI, Anatol

Natural isotopes. Pt. 4. Separation by means of electrolysis.
Przem chem 41 no.6:293-296 Je '62.

1. Katedra Chemii Jadrowej, Uniwersytet, Warszawa.

SELECKI, A.

"Industrial applications of radioactive elements." Reviewed by
A.Selecki. Przem chem 41 no.6:343-344 Je '62.

SELECKI, Anatol

"Separation of isotopes". Reviewed by Anatol Selecki. Przem
chem 4. no.9:539-540 S '62.

SELECKI, Anatol, doc. dr.; DOBKOWSKI, Zbigniew, mgr inz., st. asystent

Theoretical aspects of some thermodynamic isotope effects. Wiad
chem 18 no.9:523-533 S '64

1. Head, Department of Nuclear Chemical Engineering, Technical
University, Warsaw, and Head, Laboratory of Dividing and Apply-
ing Durable Isotopes, Department XVI, Institute for Nuclear
Research, Warsaw (for Salecki). 2. Department of Nuclear Chemical
Engineering, Technical University, Warsaw (for Dobkowski).

P/014/63/042/003/001/003
D204/D307

AUTHORS: Selecki, Anatol and Tymiński, Bogdan

TITLE: Results of a study of high-efficiency 'polpak' column packing for the separation of isotopes

PERIODICAL: Przemysł Chemiczny, v. 42, no. 3, 1963, 156-161

TEXT: A description is given of a turbulizing 'polpak' packing consisting of a large number of metallic steel gauze strips twisted around their longitudinal axes and packed in parallel into the distillation column. Measurements of molar flow yield through a height equivalent to 1 theoretical plate for various packings, flow resistance during rectification, and dynamic static and total retention in dependence on feed rate and pressure were carried out. The data are tabulated, shown graphically, compared with other commercial column packings, such as Spraypak 34/22, Heli-grid, Raschig rings etc, and discussed theoretically. It is shown that polpak compares very favorably with the other packings; its efficiency (molar flow yield through 1 theoretical plate) is very high and the

Card 1/2

Results of a study ...

P/014/63/042/003/001/003
D204/D307

flow resistance very low. This makes polpak particularly suitable for distillation under reduced pressures. Polpak may be used in both laboratory and industrial conditions and may be made of a wide range of materials. There are 12 figures and 4 tables.

ASSOCIATION: Katedra Chemii Jądrowej Uniwersytetu Warszawskiego
(Department of Nuclear Chemistry of Warsaw University)

SUBMITTED: May 30, 1962

Card 2/2

SELECKI, Anatol; BULANDA, Jan

Some problems of chemonuclear technology. Pt.2. Przem
chem 42 no.6:279-282 Je '63.

1. Zaklad Stosowania Izotopow w Chemii i Technologii
Chemicznej, Instytut Badan Jadrowych, Warszawa.

L 43568-65 EPF(c)/EPT(n)-2/EWT(m)/EWG(m)/EWF(b)/T Pr-L/Pu-4 RWH

ACCESSION NR: AP5012923

PO/0046/64/009/010/0809/0814 29

AUTHOR: Selecki, Anatol (Seletski, A.) 24

TITLE: Separation of isotopes in electrolytic column. Preliminary theoretical approximation β

SOURCE: Nukleonika, v. 9, no. 10, 1964, 809-814

TOPIC TAGS: isotope, isotope separation, isotope separation equipment, electrolysis, electrolytic cell

ABSTRACT: The article describes a new proposed method for multiplying the unit separation effect corresponding to the enrichment of isotopes. The feasibility of using a single electrolyzer is examined theoretically under assumed simplified conditions. Such an electrolyzer operates continuously by counterflow and conversion of two non-mixing liquid phases. One of the liquids is also the electrolyte, the other acts as the cathode. For both phases the linear flow velocity, the concentration, the coefficient of self-diffusion and the isotope content must be known in order to

Card 1/2

L 43568-65

ACCESSION NR: AP5012923

establish the possibility of increasing the unit separation effect. The mathematical analysis is carried out here for the specific case of a mercury cathode in an electrolyzer where an enrichment of some lithium isotopes takes place.

"I am indebted to Professor, Dr. K. Akerman, Dr. J. Roszak and Dr. L. Stolarczyk for proofreading of the manuscript and for valuable remarks." Orig. art. has: 3 figures, 17 formulas.

ASSOCIATION: Katedra Jadrowej Inzynierii Chemicznej, Politechnika Warszawska, Warsaw (Department of Nuclear Chemical Engineering, Warsaw Polytechnic Institute); Zaklad Stosowania Izotopow w Chemii i Technologii Chemicznej, Instytut Badan Jadrowych, Warsaw (Department of Isotope Application to Chemistry and Chemical Engineering, Institute of Nuclear Research)

SUBMITTED: 09Feb64

ENCL: 00

SUB CODE: NP, GC

NO REF SOV: 000

OTHER: 000

JPRS

Card 2/2 p^v8

L 09212-67

ACC NR: AP7002752

SOURCE CODE: PO/0046/66/011/005/0339/0343

AUTHOR: Selecki, Anatol--Seletski, A.; Graczyk, Jan--Grachik, Ya. 15

ORG: Department of Isotope Applications in Chemistry and Chemical Technology,
Institute of Nuclear Research, Warsaw-Zeran (Zaklad Stosowania Izotopow w Chemii i
Technologii Chemicznej, Instytut Badan Jadrowych)

TITLE: Investigations on the isotopic composition of water from Tarnobrzeg Basin

SOURCE: Nukleonika, v. 11, no. 5, 1966, 339-343

TOPIC TAGS: isotope, surface water

ABSTRACT: The isotopic composition of water samples from Tarnobrzeg sulphur mines
was determined: It was found that it does not differ from the isotopic composition
of surface waters. The flotation method used for measurements is described and its
accuracy estimated. Orig. art. has: 2 tables. [NA]

SUB CODE: 18, 07 / SUBM DATE: 21Dec65 / ORIG REF: 001 / SOV REF: 005
OTH REF: 010

Card 1/1 mla

0925 1626

L 09291-67 SR(t)/ETI IJP(c) JD
ACC NR: AP7002370 SOURCE CODE: PO/0046/66/011/006/0437/0440

34

AUTHOR: Selecki, Anatol--Selecki, A; Czelej, Marek--Czelej, M.

ORG: [Selecki] Department Isotope Applications in Chemistry and Chemical Technology, Institute of Nuclear Research, Warsaw (Zaklad Stoswania Izotopow w chemii i Technologii Chemicznej Instytutu Badan Jadrowych); [Czelej] Department of Nuclear Chemical Engineering, Warsaw Polytechnic Institute, Warsaw (Katedra Jadrowej Inzynierii Chemicznej Politechniki Warszawskiej)

TITLE: Enrichment of ^{37}Cl by counter-current electrolysis of fused PbCl_2

SOURCE: Nukleonika, v. 11, no. 6, 1966, 437-440

27

TOPIC TAGS: electrolysis, current density

ABSTRACT: The enrichment of ^{37}Cl was realized by countercurrent electromigration in molten PbCl_2 . The current density was 5 A/cm^2 . After 73 hr the concentration of ^{37}Cl obtained on the boundary, $\text{PbCl}_2\text{-Pb (K)}$, was 30.9%. It was calculated that in this case simple enrichment factor was 0.002. The authors thank Master Engineer Z. Wisza for his contribution. Orig. art. has: 2 figures and 1 table.

[NA]

SUB CODE: 07,09 / SUBM DATE: 21Dec65 / ORIG REF: 001

Card 1/1

0925 0672

SELECKI, Borys

Further observations and new surgical technic in subdural hygroma.
Neurologia etc. polska 4 no.2:153-160 Mar-Apr 54.

1. Z Kliniki Neurochirurgii Akademii Medycznej w Warszawie.
Kierownik; prof. dr J.Chorobski.

(LYMPHANGIOMA,
subdural, surg.)
(BRAIN, neoplasms,
lymphangioma, subdural, surg.)

SELECKI, Borys; STEPIEN, Lucjan

Speech disorders in focal lesions of the region bordering the temporal, parietal and occipital lobes of the dominant hemisphere. Rozpr.wydz. nauk med. 6 no.2:55-71 '61.

1. Z Panstwowego Instytutu Psychoneurologicznego w Pruszkowie Dyrektor: prof. dr med. Zygmunt Kuligowski i z Zakladu Neurochirurgii Polskiej Akademii Nauk w Warszawie Kierownik: prof. dr med. Lucjan Stepień.

(SPEECH DISORDERS etiol) (BRAIN dis)

SELECKY, F. 2

CZECHOSLOVAKIA

F. SVEC, E. HLAVAYOVA and V. DITTERTOVA, Oncology Research Institute (Vyskumny ustav onkologicky) Chief (reditel) Docent Dr V. THURZO, and Department of Pharmacodynamics, Chemistry Institute of the Slovak Academy of Sciences, Czechoslovak Academy of Sciences (Oddelenie farmakodynamiky Chemickeho ustavu SAV - CSAV) Head (prednosta) F. SELECKY MD, CSc, Bratislava.

"Pharmacology and Toxicology of 6-Azauracil Riboside."

Prague, Casopis Lekarů Ceskych, Vol 102, No 19, 10 May 63; pp 505-511.

Abstract [English summary modified]: Comprehensive studies in rats, rabbits and cats: urinary levels after 0.1 and 1 Gm /Kg. i.v. in healthy and hepatic rats confirm that compound is degraded by liver; 0.1 Gm /Kg. did not affect respiration, BP or BP response to epinephrine in cats; slightly potentiated acetylcholine contraction of ileum; at 0.1 and 0.2 Gm /Kg. in cat heart-lung preparation it induces bradycardia and makes heart minute volume more susceptible to phenobarbital depression. Graph, 6 tables, 4 kymograms; 7 Western, 8 Czech & 1 Hungarian reference.

1/1

1
[CZECHOSLOVAKIA]

L. VREBOVAY, A. DEMKOVA and F.V. SELECKY, Chemistry Institute of the Slovak Academy of Sciences, Czechoslovak Academy of Sciences (Chemicky ustav Slovenskej Akademie Vied, CSAV,) Chief (riaditel) Academician J. KASATKO; Bratislava.

"Protective Effect of Dehydroabietic Acid Diethylaminoethylamide (Substance E-25) Against $CaCl_2$ -Arrhythmia in Rats."

Prague, Casopis Lekarů Ceských, Vol 102, No 19, 10 May 63; pp 527-531.

Abstract [English summary modified]: Comparative studies reveal that whereas there is a clear antifibrillatory dose-response curve with procainamide, quinidine antifibrillatory effect is relatively independent of dose; effect of "E-25" is 10 to 20 times stronger than that of procainamide and twice stronger than that of quinidine but only at optimal (8 to 10 mg /Kg.) doses; at lower doses it is weaker and at higher doses equal to that of quinidine. Two graphs; 2 Czech and 10 Russian references.

L 13229-66

ACC NR: AP6006036

SOURCE CODE: CZ/0053/65/014/004/0291/0291

AUTHOR: Drimal, J.; Pavek, K.; Selecky, F.

ORG: Institute of Pharmacology, CSAV, Bratislava (Farmakologicky ustav CSAV)

TITLE: Study of the therapeutic effects of Na sub 2 EDTA on an experimental model of ventricular tachycardia caused by digoxine [This paper was presented during the Twelfth Pharmacologic Days, Smolenice, 26 Jan 65.]

SOURCE: Ceskoslovenska fysiologie, v. 14, no. 4, 1965, 291

TOPIC TAGS: dog, drug effect, pharmacology, circulatory drug

ABSTRACT: Study in barbiturate-anesthetized dogs revealed that Na₂EDTA depresses formation of ectopic ventricular impulses and decreases the tendency to arrhythmia.

JPRS

SUB CODE: 06 / SUBM DATE: none

Card 1/1

SELECKY, F.

"Biological Valuation of the Male and Female Sexual Hormones." p. 3 (CHEMICKE ZVESTI,
Vol. 5, No. 1/2, Jan./Feb. 1951) Bratislava, Czechoslovakia

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

SELECKY, F.

JEZO, I.; SELECKY, F.; TAMCHYNA, J. "Hypnotically active triazenes." p. 121 (Chemicke Zvesti
Vol. 5, no. 3/4, March/April, 1951. Bratislava.)

SO: Monthly List of East European Accessions, Vol. 3, No. 6, Library of Congress, June 1954.
Uncl.

SELECKY, F.

(4)⁷

~~4-Methyl-1-diethylcarbamoylpiperazine. J. Ježo, K. B. Bol, and F. Selecký (Výskumný ústav pre farm. a biochem., Bratislava, Czech). Chem. Zveste 6, 303 (1972).~~
Methylbis(2-chloroethyl)amine (1) with Et₃NO⁺OH⁻ in BuOH yields about 20% (based on 1) 4-methyl-1-methylcarbamoylpiperazine. Jan Mlicka

ME

SELECKÝ, Fr.

Sedative effects of diphenylimidazolidine derivatives.
L. Molnár, Fr. Selecký, and J. Tamchyna (Výzkumný ústav pro farm. a biochem., Bratislava, Czech.). *Chem. Zvesti* 7, 107-28 (1953).—Sedative effects of diphenylimidaz-

olidine derivs. (I) of the type, $\text{NR} \cdot \text{C}(\text{O}) \cdot \text{CPh}_2 \cdot \text{NR}' \cdot \text{C}(\text{O}) \cdot \text{S}$ (S), were studied on rats by using a new very exact method, permitting a large mobility record on a very large no. of exptl. animals. The analgesic effects by elec. irritation and the anticonvulsive effects were also tested. For therapeutic use the best was 2-thio-5-oxo-4,4-diphenylimidazolidine (II), which was almost nontoxic, without hypnotic effect, and in analgesic effects comparable with aminopyrine. I did not increase fatigue as phenylethylbarbituric acid, but if I were used in larger amts. the agility of animals was increased. From the galenic standpoint II can be mixed with amidopyrine, phenacetin, and caffeine. Jan Miska

CZECH

Anticonvulsive effect of derivatives of phenylacetylcarbamides. L. Buran, F. Selecký, and P. Šešćovík (Slovenská akad. vied, tech. úst. Bratislava, Czech.). *Chem. Zvesti* 8, 404-9(1954).—The effect was investigated of phenylacetylcarbamide (I), diphenylacetylcarbamide (II), α -bromophenylacetylcarbamide (III), and phenylacetylthiocarbamide (IV) on rats in preventing shock caused by pentamethylenetetrazole. I, 600 mg./kg. or higher, was 100% effective; III, 1500 mg./kg., decreased mortality of the rats by 50%, but did not prevent convulsions. Up to 1500 mg./kg. II and IV were not effective. Jan Miska.

MARKOVIC, O.; SELECKY, F. V.; SIMAGJAKOVA, J.

The use of mucin from flax seed for preparation of crystalline suspension of estrogens. Cesk. farm. 4 no.5:243-246 June 55.

1. Zo Slovenskej akademie vied, Chemicky utav, oddelenie experimentalnej farmakologie, Bratislava Z Ustavu farmaceutickej prevadzky Farmaceutickej fakulty Uk v Bratislave.

(PLANTS

flax, mucin from, use in prep. of crystalline suspension of estrogens)

(ESTROGENS

prep. of crystalline suspension, use of mucin from flax seed.)

BURAN, Lu'dovit; SELECKY, Frantisek, V.

Evaluation of analgesic function with the aid of electrostimulator.
Biologia, Bratisl. 10 no.1:51-61 1955.

1. Ustav chemickej technologic organickych latok Slovenskej
akademie vied v Bratislave.

(MORPHINE, effects,
evaluation of analgesic eff. with electric pain
stimulation.)

(ANALGESIA,
evaluation of analgesic state with electric pain
stimulation.)

SELECKY, F.

SCIENCE

Periodicals: BIOLOGIA Vol. 10, no. 6, 1955

SELECKY, F. PODHRADSKY, V: Effect of galegine sulfate and extract from Galega officinalis on the chromatophore of the frog Hyla arborea. p. 743.

Monthly List of East European Assessments (EEAI) LC, Vol. 8, no. 5,
May 1959, Unclass.

31107-17
✓ Pharmacology of Galega officinalis. P. V. Selecký
(Slovenská Akad. Věd, Bratislava, Czech.) ~~Pharmazie~~ **MD**
24, 198-207 (1955).—There were found no direct or indirect
lactotropic or lactogenic effects from galegine sulfate (I) or
from crude exts. of plant and seed. Both I and crude exts.
influence the carbohydrate metabolism; 10 mg./kg. body
wt. brought about hypoglycemia. The drug also showed a
sedative effect, chromatophore-stimulating activity, and in-
fluence on the circulation. K. Macek

~~FRANTIŠEK, V.~~
SELECKY, F.V.

med

Influencing blood coagulation with galegine sulfate.
František V. Selecký and Viktor Rosival (Slovak Acad. Sci., Bratislava, Czech.), *Biologja* 11, 480-5(1958).
Galegine sulfate (I) *in vitro* inhibits coagulation of blood. The effect is in linear dependence on the amt. of I. Intravenous application of I to dogs (10 mg./kg.) slightly prolongs prothrombin time (by 15-20%) and recalcification time (by 40%), whereas application *per os* is without effect. The mechanism of effect of I is discussed in comparison with that of Tronexan.
J. J. Hrbáček

2

CZECHOSLOVAKIA / Chemical Technology. Chemical Prod- H-6
ucts and Their Application. Safety
and sanitation.

Abs Jour: Ref Zhur-Khimiya, No 23, 1958, 76177.

Author : Rosival, L., Selucky, F. V., Vrbovsky, L.
Inst : Not given.
Title : Experimental Acute Poisoning with Phosphoroorganic
Insecticides.

Orig Pub: Bratisl. lekar. listy, 1958, 1, No 3, 151-160.

Abstract: The toxicity of 90% and 86% malathion (I), ethyl-
parathion (II), methylparathion (III), paraoxone,
systox (IV), isosystox, potasane, preparations
1817-008A and 1817-009, chlcriton (V), E-605,
enatox, pestox-III, and metasytox (VI) was stud-
ied by experimenting with animals (5,000 mice,
800 rats, 32 rabbits, 50 guinea pigs and 4 dogs),

Card 1/2

GALENO MEVANIA / Chemical Technology. Chemical Products and Their Application. Safety and Sanitation. 1-6

Abs Jour: Ref Zaur-Khimiya, No 23, 1958, 78177.

Abstract: the insecticides being introduced by various methods in erythor, propyleneglycol, vegetable oil and various suspensions. I and V proved to be the least toxic. III is less toxic than II, and VI is less toxic than IV. 86% of I is more toxic than 90% I. Propyleneglycol increased and vegetable oil decreased the toxicity of insecticides. A rise in the sensitivity to phospho-organic insecticides was observed at their repeated introduction. Bibliography with 23 titles. -- G. Kozhovskaya.

Card 2/2

16

ROSIVAL, V.; SELECKY, V. Fr.

Findings on seasonal changes of blood coagulation. Polski tygod. lek.
13 no.1:1-5 6 Jan 58.

1. (Instytut Chemiczny Slowackiej Akademii Nauk, Wydział Chemii Farmaceutycznej i Biochemii; Bratysława, Czechosłowacja; kierownik: prof. dr med. Vasatji) Adres: Academia Scientiarum Slovaca Pharmacologia Experimentalis, Bratislava-Mlynske Nivy 37 Czechosłowacja.

(BLOOD COAGULATION

seasonal variations in humans & dogs (Pol))

(PERIODICITY

seasonal variations in blood coagulation in humans & dogs
(Pol))

COUNTRY : CZECHOSLOVAKIA
 CATEGORY : Chemical Technology, Chemical Products and
 Their Applications, Pharmaceuticals, Vitamins.*
 RES. JOUR. : Rechn., No. 93 1959, No. 89250

AUTHOR : Babulova, A.; Ditteova, V.; Selecky, F.
 INST. : -
 TITLE : Determination of Vitamin D Biological Activity
 in Pharmaceutical Preparations

ORIG. PUB. : Pharmacia (Ceskosl.), 1958, 27, No 7, 194-200

ABSTRACT : In the comparison of different determination
 methods of Vitamin D biological activity it
 was found that the most suitable method is
 one that determines ash content of the bones
 and the roerigeroscopic test applied to fat-
 free bones of the investigated animals.
 -- I Matroeyeva.

*Antibiotics.

CARD: 1/1

PAVEK, K.; SELECKY, F.V.

Effect of reserpine on G-strophanthin toxicity. Cesk. fysiол. 8 no.3:
230-231 Apr 59.

1. Chemicky ustav SAV, oddelenie farmaceutickej chemie a biochemie,
Bratislava. Prednesene na III. fysiologickych dnoch v Brne dna 14. 1.
1959.

(STROPHANTHIN, toxicity,
eff. of reserpine (Cz))

(RESERPINE, eff.
on strophanthin tox. (Cz))

BURAN, L.; BABULOVA, A.; SELECKY, F.V.

Cardiotoxic activity of glycosides from Slovak Convallaria maj. L.
Acta physiol pol 12 no.4:571-573 '61.

1. Z Oddziału Farmakologii Związków Organicznych Zakładu Chemii,
Słowackiej Akademii Nauk, Bratysława.
(CONVALLARIA pharmacol)

SELECKY, F.V.; BABULOVA, A.; BURAN, L.; PAVEK, K.

Pharmacological analysis of a new cardiac glycoside. Acta physiol
pol 12 no.4:575-582 '61.

1. Z Oddziału Farmakologii związków organicznych Zakładu Chemii
Słowackiej Akademii Nauk, Bratysława. Kierownik: dr F.V.Selecky.
(CARDIAC GLYCOSIDES pharmacol)

CZECHOSLOVAKIA

Ludovic BURAK, Karel RAJCH and Frantisek V. SILLAKY, Department of Pharmacology, Chemical Institute of the Slovak Academy of Sciences, Czechoslovak Academy of Sciences (Institute of Pharmacodynamics, Chemicky ustav Slovenskej akadémie vied, Československá akadémia vied) Bratislava.

"Changes in the Sensitivity of Guinea Pigs to C-Scrophanin During the Course of the Year."

Bratislava. Bioteknia, Vol 17, No 12, 1962; pp 892-896.

Abstract [German summary modified]: Guinea pigs were most sensitive to scrophanin (median lethal dose) in Nov-Dec-Jan, least sensitive in Mar-Apr-May; the difference between Winter and Spring months is statistically significant; the other seasons are intermediate and difference not significant. Temperature and barometric changes did not affect MLD. Three groups: 1 Czech, 1 Polish and 1 Western ref's.

2/1

SELECKY, F.V., BABULOVA, A., BURAN, I., VRABLOVA, O.

CSSR

no academic degrees indicated

CSAV, Chemical Institute of the Slovakian Academy of Sciences, dept. of pharmacodynamics (Chemicky ustav Slovenskej akademie vied, oddelenie farmodynamiky)
Bratislava, director: J. VASATKO, academician - (for all)

Bratislava, Bratislavske Lekarske Listy, No 1, 1963, pp 11-23

"Helveticoside, a Cardiolglycoside from Erysimum Canescens Roth of Slovak Origin"

(4)

ROSIVAL, L.; VRBOVSKY, L.; SELECKY, F.V.

Contribution to the problem of side-effects of some organic phosphates.
Bratisl. Lek. Listy 42 no.1:26-30 '62.

1. Z Ustavu hygieny Lek. fak. Univ. Komenskeho v Bratislave, veduci
akademik V. Mucha, Dr. Sc., a z Farmakologickeho laboratoria oddelenia
farmaceutickej chemie a biochemie Chemickeho ustavu SAV v Bratislave,
veduci MUDr. F. V. Selecky, C. Sc.
(PHOSPHATES toxicol)

DITTERTOVA, V.; BURAN, L.; BABULOVA, A.; SELECKY, F.V.; technicka spolupraca
SEDLAROVA, B.; NEMECEK, V.

Effect of oxyphylline on the cardiotoxic activity of convallatoxin
and helveticoside and on their action on the heart-lung preparation
of the cat. Cesk. farm. 12 no.2:104-107 F '62.

1. CSAV, Chemicky ustav SAV, oddelenie farmakodynamiky, Bratislava.
(HEART) (LUNG) (THEOPHYLLINE) (CARDIAC GLYCOSIDES)
(CONVALLARIA)

MACHOVA, J.; PAVEK, K.; SELECKY, F.V.

Pharmacology of substances isolated from Vinca minor L.I. Effect of Vincamine on arterial blood pressure. Bratisl. Lek. Listy 42 no;12: 713-721 '62.

1. Z Chemického ustavu SAV, riaditel' akademik J. Vasatko.
(BLOOD PRESSURE pharmacol) (PLANTS MEDICINAL pharmacol)

SELECKY, F.V.

CZECHOSLOVAKIA

V. DITTEPTOVA, L. BURAN, A. ZABULOVA and F.V. SELECKY, Pharmacodynamics Division of Chemical Department, Slovak Academy of Sciences Bratislava; Czechoslovak Academy of Sciences. (Chemicky ustav SAV [Slovenska Akademia Vied], oddelenie farmakodynamiky, CSAV [Ceskoslovenska Akademia Ved,]) Bratislava.

"Effect of Oxyphylline on Cardiotoxic Activity of Convallatoxin and Helveticoside and on Their Effect on the Cat Heart-Lung Preparation."

Prague, Ceskoslovenska Farmacie, Vol 12, No 2, Feb 63; pp 104-107.

Abstract [English summary modified]: Oxyphylline-convallatoxin* preparation has maximal therapeutic effect at 29% of lethal dose, convallatoxin alone at 57%. Helveticoside-oxyphylline ("Theohelvetin") achieve maximal effect at 41% of lethal dose rather than at 62% as with the first component alone. Differences are statistically highly significant. Table, 4 graphs; 4 Czech, 1 Hungarian, 9 Western ref's. *("Theoconvallin.")

1/1

CZECHOSLOVAKIA

MACHOVA, J; SELECKY, F.V.

Pharmacological Institute CSAV (Farmakologicky ustav CSAV),
Bratislava (for both)

Bratislava, Bratislavske lekarske listy, No 8, 1963, pp
449-453

"The Pharmacology of the Substances Isolated from Vinca minor
L. II. The Effect of Vincamine on the Nervous System -
A Contribution to the Problem."

CZECHOSLOVAKIA

J. KUCHOVA, E. STUMOVSKY and F. V. SELECKY, Department of Chemistry (Chemicky ustav) Chief (rieditel) Academician J. VASATKO, and Department of Endocrinology (Endokrinologicky ustav) Chief J. PODOBA, MD CSc; Slovak Academy of Sciences, Bratislava, Czechoslovak Academy of Sciences. (SAV [Slovenska Akademia Ved], CSAV [Ceskoslovenska Akademia Ved].)

Analysis and Evaluation of the Pressor Response to Carotid Occlusion in Anesthetized Cats.

Prace, Casopis Lekaru Ceskych, Vol 102, No 10, 8 Mar 63; pp 271-275.

Abstract [English summary modified]: Authors found positive correlation between response and initial blood pressure value when latter was below 170 mm., and negative above that value. These and related findings are discussed and a statistical method is proposed for evaluation of effect of substances tested for effect on blood pressure by carotid occlusion method. 10 graphs, 3 tables; 10 Western references.

SELECKY, F.V.; BABULOVA, A.; BURAN, L.; technika spolupraca VRABLOVA, O.

Helveticoside, a cardiac glycoside from *Erysimum canescens* Roth of Slovak origin. Bratisl. lek. listy 63 no.1:11-23 '63.

1. Z CSAV, Chemickeho ustavu Slovenskej akademie vied, oddelenia farmakodynamiky v Bratislave, riaditel' ustavu akademik J. Vasatko.
(CARDIAC GLYCOSIDES) (CONVALLARIA) (STROPHANTHIN)

VRBOVSKY, L.; DEMKOVA, A.; SELECKY, F.V.; Technicka spolupraca:
SIKLOVA, M.

Protective effect of diethylaminoethylamide of dehydroabiatic
acid (substance E-25) in CaCl₂-induced arrhythmias in rats.
Cas. lek. cesk. 102 no.19:527-531 10 My '63.

1. CSAV, Chemicky ustav SAV, Bratislava, riaditel akademik
J. Vasatko.

(PHENANTHRENES) (MYOCARDIAL DEPRESSANTS)
(ARRHYTHMIA) (CALCIUM) (CHLORIDES)
(RATS)

L 13231-66 EWP(1) RM

ACC NR: AP6006034

SOURCE CODE: CZ/0053/65/011/001/0290/0291

AUTHOR: Ditteova, V.; Selecky, F. V.

ORG: Institute of Pharmacology, CSAV, Bratislava (Farmakologicky ustav CSAV)

TITLE: Effect of veratrum alkaloids in anesthetized and unanesthetized animals
[This paper was presented during the Twelfth Pharmacologic Days, Smolenice, 27 Jan 65.]

SOURCE: Ceskoslovenska fysiologie, v. 14, no. 4, 1965, 290-291

TOPIC TAGS: drug effect, pharmacology, dog, blood pressure, alkaloid

ABSTRACT: Study of effect of "veralest" and protoveratrine A in normal and urethane-anesthetized dogs revealed that the intensity and duration of hypotension was increased in anesthetized dogs (central stimuli presumably being dominant in awake dogs) while bradycardia was potentiated in unanesthetized dogs (tachycardic effect of urethane in dogs). [JPRS]

SUB CODE: 06 / SUBM DATE: none

Card 1/1

L 13582-66

ACC NR: AP6006070

SOURCE CODE: CZ/0053/65/014/004/0307/0307

AUTHOR: Pavek, K.; Drimal, J.; Selecky, F. V.

ORG: Institute of Pharmacology, CSAV, Bratislava (Farmakologicky ustav CSAV)

TITLE: Activation of the pulmonary chemoreflex with vincamine [This paper was presented during the Twelfth Pharmacologic Days, Smolenice, 28 Jan 65.]

SOURCE: Ceskoslovenska fysiologie, v. 14, no. 4, 1965, 307

TOPIC TAGS: pharmacology, drug effect, respiration, reflex activity, cardiovascular system

ABSTRACT: Injection of 1.5 mg /kg of vincamine into arterial pulmonary circulation of dogs causes an average 30-second apnea; the cardiovascular dynamics of the phenomenon and the respiratory syndrome were studied in detail. The cardiovascular reaction is related to the respiratory reflex and can be excluded by vagotomy, artificial pulmonary ventilation or guanethidine premedication. [JPRS]

SUB CODE: 06 / SUBM DATE: none / ORIG REF: 001 / OTH REF: 001

Card 1/1 HW

L 13213-66

ACC NR: AP6006101

SOURCE CODE: CZ/0053/65/014/004/0320/0320

AUTHOR: Vrbovsky, L.; Selecky, F. V.

ORG: Institute of Pharmacology, CSAV, Bratislava (Farmakologicky ustav CSAV)

24
B

TITLE: Effect of the diethylaminoethylamide of dehydroabiatic acid (substance E-25) on the fibrillation threshold in anesthetized cats [This paper was presented during the Twelfth Pharmacologic Days, Smolenice, 28 Jan 65.]

SOURCE: Ceskoslovenska fysiologie, v. 14, no. 4, 1965, 320

TOPIC TAGS: drug effect, pharmacology, cat, cardiovascular system, organic amide, aromatic carboxylic acid

ABSTRACT: The substance named in the title has a very similar effect to quinidine and procaine in electrically stimulated atria of anesthetized cats except for a slight delay at the onset. [JPRS]

SUB CODE: 06 / SUBM DATE: none / ORIG REF: 001 / OTH REF: 001

jrn

Card 1/1

SELECKY, F.V. MUDr., CSc.; BABULOVA, A.; BURAN, L.; LANGER, J. Technicka spolupracca: VRABLOVA, O.; PETRASOVA, E.; NEMCEK, V.

The cumulative effect of various cardiac glycosides extracted from domestic raw materials. Bratisl. lek. listy 45 no.10: 577-584 31 My'65.

1. Farmacologicky ustav Csekoslovenskej akademie vied (riadi- telka: prof. MUDr. H. Raskova, DrSc.); pracovisko Bratislava (veduci: MUDr. F.V. Selecky CSc.). Katedra patologickej anatomie Lekarskej fakulty Univerzity Komenskeho v Bratislave (veduci: prof. MUDr. M. Brozman, DrSc.).

L 13583-66

ACC NR: AP6006071

SOURCE CODE: CZ/0053/65/014/004/0308/0308

AUTHOR: Pavek, K.; Drimal, J.; Selecky, F. V.

ORG: Institute of Pharmacology, CSAV, Bratislava (Farmakologicky ustav CSAV)

TITLE: Hemodynamics of the dog in unanesthetized condition and in systemic anesthesia with pentobarbital [This paper was presented during the Twelfth Pharmacologic Days, Smolenice, 29 Jan 65.]

SOURCE: Ceskoslovenska fysiologie, v. 14, no. 4, 1965, 308

TOPIC TAGS: cardiovascular system, dog, anesthesia, drug effect, nervous system drug, pharmacology

ABSTRACT: Very detailed measurement of cardiovascular sequence of events in trained stabilized dogs following 30 mg /Kg of pentobarbital intravenously; the myocardial depressive action of the barbiturate was studied in detail. [JPRS]

SUB CODE: 06 / SUBM DATE: none

Card 1/1

DRIMAL, J.; PAVEK, K.; SELECKY, F.V.; Techn. spolupraca: SLAVIKOVA, E.; NEMCEK, V.

Study of the therapeutic effect of NA2EDTA on an experimental model of ventricular tachycardia caused by digoxin. Bratisl. lek. listy 45 no.6:339-352 30 S '65.

1. Farmakologicky ustav Ceskoslovenske akademie ved (riaditelka prof. MUDr. H. Raskova, DrSc.; veduci Slovenskych pracovisk MUDr. F.V. Selecky, CSc.)

CZECHOSLOVAKIA

DIPTREBNA, V.; SELECKY, J.V.; Pharmacological Institute, Czechoslovak Academy of Sciences (Farmakologicky Ustav CSAV), Bratislava.

"Contribution to the Understanding of the Emetic Action of Veratrum Alkaloids."

Prague, Ceskoslovenska Farmacie, Vol 15, No 9, Nov 66, pp 496-498

Abstract /Authors' English summary modified 7/: Emetic action of veralest and veralest B 88-CH isolated from *Veratrum album* ssp. *lobelianum* grown in Slovakia was investigated. ED₅₀ of the emetic action was compared to that of protoveratrine A (Puroverin Sandoz). Veralest and protoveratrine A have the same effect, veralest B 88 CH is less effective. Tests were conducted on dogs and pigeons. Values of ED₅₀ are discussed. 1 Table, 17 Western, 1 Hungarian reference. (Manuscript received 15 Feb 66).

1/1

SELECKY J.

Liecenie hypertyreozy v Stos kupal'och. /Treatment of hyper-
thyroidism at Stos mineral baths/ Sloven. lekar 12:6 June 50
p. 296-301.

1. NAI
CIML Vol. 20, No. 2 Feb 1951

SELECKY, J.

Sick leave absenteeism in polygraphers. Lek. obzor 1 no.11:565-573
1952. (CIML 24:3)

SELECKY, V.; ROSIVAL, V.

SELECKY, V.; ROSIVAL, V. Influence of galegine on the coagulability of blood. p. 480.

Vol. 11, No. 8, 1956.

BIOLOGIA

SCIENCE

Bratislava, Czechoslovakia

So: East European Accession, Vol. 6, No. 2, Feb. 1957

BESFAMIL'NAYA, Z.I., dotsent; SELEDEVKINA, T.A.

Primary sarcoma of the stomach. Khirurgiia 32 no.6:13-16 Je '56.
(MLRA 9:10)

1. Iz kliniki khirurgii (zav. = prof. V.S.Mayat) lechebnogo
fakul'teta II Moskovskogo meditsinskogo instituta imeni I.V.Stalina

(SARCOMA -

stomach, pathol. classif.)

(STOMACH, NEOPLASMS

sarcoma, pathol. classif.)

86-58-4-8/27

AUTHOR: Seledkin, A. V., Lt Col

TITLE: Visual Search for Aerial Targets at Twilight (Vizual'nyy poisk
vozdushnykh tseley v sumerki)

PERIODICAL: Vestnik vozdushnogo flota, 1958, Nr 4, pp 30-32 (USSR)

ABSTRACT: The author states that it is possible to use fighter airplanes equipped with conventional gunsights, in addition to interceptors equipped with radar sights, when intercepting aerial targets during twilight as well as on moonlight nights. The training flights in the author's unit have shown that at twilight under favorable weather conditions aerial targets can be detected against the lighter part of the sky at ranges of 1000 - 4000 m. The visual search and detection of targets on moonlight nights is possible under full moon or near-full moon conditions. But there are only 7 - 8 such nights in a month. On moonlit nights the success in visual search for targets depends on the position of the fighter airplane in relation to the target and the moon. The pilot starts the visual search for a target as soon as he is vectored by the ground controller to such a point from which the visual detection is possible

AVAILABLE: Library of Congress

Card 1/1 1. Aerial warfare - USSR 2. Aerial targets - Interception

SELEDKIN, A.V., gvardii podpolkovnik, voyenny shturman pervogo klāssa

Using the azimuth indicator during an instrument landing approach.
Vest.Vozd.Fl. no:3:35-37 Mr '60. (MIRA 13:9)
(Instrument landing systems)

SELEDKOV, N.T., inzhener; ZAYTSEV, B.F.

Prefabricated ventilation ducts in the tall building at the Red Gates. Biul.
stroit.tekh. 10 no.13:22-23 Ag '53. (MLRA 6:10)

1. Arkhitekturnaya masterskaya MFS.

(Ventilation)

SELEIKOV, N.T., inzhener; ZAYTSEVA, B.F., inzhener.

Prefabricated ventilation ducts. Rats.i izobr.predl.v stroi. no.73:
27-29 '54. (MIRA 7:6)
(Ventilation)

IPATOV, P.M.; LUNEVSKIY, P.D.; SELEDKOV, Yu.V.; SPIVAKOV, Ya.N.; TARASOV,
L.Ya.

[Systems of underground working of deposits of non-ferrous metals and
gold] Sistemy podzemnoi razrabotki mestorozhdenii tsvetnykh metallov
i zolota. Pod obshchei red. P.M.Ipatova. Moskva, Gos. nauch.-tekhn.
izd-vo lit-ry po chernoi i tsvetnoi metallurgii, 1947. (MLRA 7:4)
(Mining engineering)