

SZALAY, Miklos

Water jet ballistics of sprinklers. Hidrologiai kozlony 43
no.4:323-327 Ag'63.

1. Epitoipari es Kozlekedesi Muszaki Egyetem I. Vizepiteszteni
Tanszeke, Budapest.

PAPP, Ferenc, dr.; BOZSONY, Denes; VAGAS, Istvan; OROSZLANY, Istvan;
SCHULHOF, Odon, dr.; SZIGYARTO, Zoltan; HETENI, Endre; HOLENYI,
Laszlo; GABRI, Mihaly; HOLLO, Istvan; KESSLER, Hubert, dr.;
WISNOVSZKY, Ivan; FINALY, Lajos; RATKY, Istvan; SZALAY, Miklos;
IHRIG, Denes; KIRALY, Lajos; KERTAI, Ede

Report on the 1959 general meeting arranged by the Hungarian
Hydrological Society. Hidrologiai kozlony 4) no.4:345-348 Ag
'60.

1. Magyar Hidrologiai Tarsasag elnoke (for Papp). 2. Magyar
Hidrologiai Tarsasag fotitkara (for Bozsony). 3. "Hidrologiai
kozlony" szerkeszto bizottsagi tagja (for Vagas, Oroszlany,
Schulhof, Szigyarto and Hollo).

L 1174-66

ACCESSION NR: AT5025205

HU/2502/64/042/004/0408/0419

AUTHOR: Laszlo, Antal (Laslo, A.) (Professor, Doctor) (Veszprem); Nemeth, Andras (Nemet, A.) (Doctor) (Veszprem); Fay, Laszlo (Fai, L.) (Doctor) (Veszprem); Szalay, Otto (Salai, O.) (Veszprem)

TITLE: Investigation of auto-ignition in a flowing system

SOURCE: Academia. scientiarum hungaricae. Acta chimica, v. 42, no. 4, 1964, 408-419

TOPIC TAGS: auto ignition, ignition lag, flow rate, oxygen, methane

52
B+1

Abstract: [English article] Corresponding concentration, temperature, ignition delay time, and flow rate values were determined for oxygen-methane systems and an equation was derived for the characterization of the relationship between these factors. It was found that the relation is similar to that existing in a stationary system. The values calculated from the equation correlated well with experimentally determined values.

Orig. art. has 19 formulas, 9 graphs, and 1 table.

ASSOCIATION: Hungarian Oil and Gas Research Institute, Veszprem

SUBMITTED: 12May64

ENCL: 00

SUB CODE: FP

NO REF SOV: 000 *OP*

OTHER: 005-

JPRS

Card 1/1

SZALAY, R.

Production of leather uppers with a smoothed grain, p. 61, BOR- ES
CIPOTECHNIKA, (Boripari Tudomanyos Egyesulet mint a Magyar Tudomanyos
Egyesuletek Szovetsege Tagedyesulete) Budapest, Vol. 5, No. 3,
June 1955

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

SZALAY, R.

Dr Fritz Stather; an obituary, p. 63, BOR- ES GIPOTECHNIKA, (Boripari Tudományos Egyesület mint a Magyar Tudományos Egyesületek Szövetsége Társasága) Budapest, Vol. 5, No. 3, June 1955

SOURCE: East European Accessions List (EEAL) Library of Congress,
Vol. 4, No. 12, December 1955

SZALAI S.

KMSZTYUS, L.; SZALAI, S.; KOCSAR, L.; KERTESZ, L.; SALANKI, J.

Nervous system and immunity. II. Possible formation of antibodies following a few seconds of antigenic stimulation. Acta microb. hung. 1 no.4:371-376 1954.

1. Institut für Pathophysiologie der Medizinischen Universität, Debrecen und Institut für experimentelle Physik der Ludwig-Kossuth-Universität, Debrecen.

(ANTIGENS AND ANTIBODIES

antibody form. in rabbits after a few seconds of antigen stimulation)

SZALAY, S.

KOCSAR, L.; KESZTYUS, L.; SZALAY, S.; KERTESZ, L.; VALYI-NAGY, T.

Studies on experimental lead poisoning. III. The effects of alcohol in acute lead poisoning. Acta physiol. hung. 5 no.3-4: 543-547 1954.

1. Institutes of Pathophysiology and of Pharmacology of the Medical University, Institute for Experimental Physics, Kossuth Lajos University, Debrecen. (Received June 25, 1953)

(LEAD POISONING, exper.

eff. of alcohol premed. in rats)

(ALCOHOL, ETHYL, eff.

on exper. acute lead pois. in rats)

SZALAY

KESZTYUS, Lorand; SZALAY, Sandor; KOCSAR, Laszlo; KERTESZ, Laszlo;
SALANKI, Janos

Nervous system and immunity. II. Possible formation of antibodies
after a few seconds of antigen stimulations. Kiserletes orvostud.
6 no.5:393-397 Sept 54.

1. Debreceni Orvostudományi Egyetem Korelettani Intezete es Debreceni
Kossuth Lajos Tudományegyetem Kiserleti Fizikai Intezete.

(ANTIGENS AND ANTIBODIES

antibody form. in rabbits after seconds-long antigenic
stimulation)

SZALAY, S.

KOCSAR, L.; SZALAY, S.; UJHELYI, Cs.; KESZTYUS, L.

Mechanism of adrenalin-cobalt antagonism. Acta physiol. hung. 11 no.3-4:
415-419 1957.

1. Pathophysiologisches Institut der medizinischen universität und
atomkernforschungsinstitut der ungarischen akademie der wissenschaftin,
Debrecen.

(EPINEPHRINE, antag.

cobalt, relation of selective inhib. in various isolated
organs to rate of organ uptake of radiocobalt (Ger))

(COBALT, eff.

selective inhib. of epinephrine in various isolated organs
& relation to rate of organ uptake of radiocobalt (Ger))

SZALAY S.
KOCSAR, Laszlo; SZALAY, Sandor; UJHESLYI, Csaba; KESZTYUS, Lorand

Mechanism of action of the cobaltous ion - epinephrine antagonism.
Kiserletes orvostud 9 no.5-6:585-588 Oct-Dec 58.

1. Debreceni Orvostudományi Egyetem Korelettani Intezete es a MTA
Atommag Kutato Intezete.

(COBALT, eff.

cobaltous ion inhib. of epinephrine actions in various animal
organs in vitro, mechanism of action (Hun))

(EPINEPHRINE, antag.

cobaltous ion in various animal organs in vitro, mechanism of
action (Hun))

SAHALAY, S

SA

350.831

3886. Discovery of uranium and thorium bearing granite rocks with Geiger-Müller counters. *Adapted: Kohler, Lep., 6, 175-81 (June, 1946) In Hungarian.*— S. Szalai and A. Szévéri have discovered U- and Th-bearing granite rocks in the Velence and Mecsek Mountains of Hungary which contain $0.6-0.75 \times 10^{-3}$ g of U and $4-7.3 \times 10^{-3}$ g of Th per gram of rock. The geological conditions in the exposed area are similar to those in Jachymov (Jachymovka) in Czechoslovakia, and it is concluded that uranium-ore may also be similarly located. The author stresses extensive use of the Geiger-Müller counter for mineral exploration, mentions that it is already used by the oil industry, and thinks that it is not impossible that the tendency of coal deposits to self ignition is detectable by radioactivity.

H. G.

ASM-31A METALLURGICAL LITERATURE CLASSIFICATION

FROM SOURCE

FROM SYLLABUS

SZALAY, SANDOR

2

Chemical Abst.
Vol. 48 No. 6
Mar. 25, 1954
Mineralogical and Geological Chemistry

Investigations into the thorium and uranium contents of the eruptive rocks in Hungary by means of Geiger-Müller counter tubes. Sandor Szalay. *Magyar Akad. Pál. Intell. Eri Jelentés Sz. B. Budapest* 10, 5-34(1948)(in English 24-34). Geological and petrographic principles applied in research for radioactive elements in Hungary. Aladar Erdvari. *Ibid.* 25-62(1948)(in English 55-8). *C.A.* 43, 8996b. Michael Fleischer

EH

9-13-54

SZALAY, S. CX

Uranium- and thorium-bearing rocks in Hungary.
 S. Szalay and Alexander Földvári. *Bányász. Közlöny*.
Lélek 81, 179-81 (1948).—An app. equipped with Geiger-
 Müller tubes was used for investigations. The rocks of
 the granite intrusion lying at the eastern side of the
 Velence mountain and Mecsek mountain contained
 $0.61-0.75 \times 10^{-3}$ g. U and $4.0-7.3 \times 10^{-3}$ g. Th. The gran-
 ite and the contact rocks of Velence mountain show definite
 similarity to the geol. conditions of Joachimsthal.
 István Pinály

ASB 554 METEOROLOGICAL LITERATURE CLASSIFICATION

JA

CH SZALAY, S.

Application of radioactive isotopes in Hungary. *Sandor Szalay*.
Magyar Kemi. Lapja 6, 71-7(1951). - Review
with description of app. installed in the Inst. for Exptl.
Physics, Univ. of Debrecen. I. Finale

ZALAV, S.

4
p.L.

Treatment of a solution containing uranyl ions with humic acids
strongly adsorb U⁶⁺ either from uranyl nitrate or carbonate
sols. and that treatment at pH lower than 3 is necessary to
liberate the U⁶⁺. The concn. of U⁶⁺ is ascribed to adsorption by
substances resembling humic acids. M. H. H. H. H.

SZALAY SANDOR

1266

RADIATION IN PRE-

the ~~officials~~ ~~an~~ international organization records fixation (reg men con-
centration after atomic test explosions. (if-auth)

42

11/11

SZALAY, S.

19

Investigation of radioactive contamination of enriched krypton prepared from air on an industrial scale. Marion Horvath, Zoltan Decsi, and Sandor Szalay. Magyar Fis. Polvóirat 3, 279-89(1955). ~~Highly enriched Kr~~ (a factor of 10^4) was prepd. from air, and purified by chem. means, such as absorption of impurities in alkali hydroxide soln. and silica gel and repeated distns. The heavy noble gases, Kr, Xe, and Rn concentrate in the residue. The radioactivity was measured with a Geiger tube, and was found to be 0.0830 mg. Rn/kg. Kr. Half-life and absorption measurements showed it to originate from Rn. No fallout radiation was detected. E. Rona

4
4030
4030

RMP

Szalay, Alexander (SANDOR)

551.513 : 551.594.14
 10119. Unusual radioactivity observed in the atmospheric precipitation in Debrecen (Hungary) between Apr. 22-Dec. 31, 1952. A. SZALAY AND D. BERÉNYI. *Acta phys. Hungar.* 5, No. 1, 1-10 (1955).
 The authors investigated, by means of an end-window β -counter tube equipment the activity of precipitation fallen in Debrecen between April 22 and December 31, 1952. At times the precipitations showed radioactivity, which proved to be due to fission products deriving from atomic explosions. These anomalous activities, with a lag of a few days, were in correlation of time with the atomic explosions published during the same period. The order of magnitude of the activity calculated for a precipitation of an area of 1/50 sq metres was 10^{-11} Curie. Calculating this figure to the whole surface of earth it

appears obvious that this activity refers to the average value of activity of the whole surface or possibly of the northern hemisphere of the earth rather than to the activity of air masses incidentally drifted here. It appears from the investigations that by using an equipment of adequate sensitivity the fission products of an atomic bomb may be registered even at very considerable distances. The authors are of the opinion that by systematic and internationally organized observations of air masses to which activity had been imparted by way of atomic explosions or in any other way, the problems of general circulation, the movement of air masses and their interchange between the two hemispheres could be most efficiently studied and thereby the solution of the most recent problems of meteorology approached.

EE 1952
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A. ①

SZALAY, Sándor

Hungary

9 17

Observation of unusual radioactivity in rainwater collected in Debrecen from April 22 to December 31, 1952. Sándor Szalay and Dénes Berényi. Magyar Tudományos Akad. Mat. és fiz. Tudományok Osztályának Közleményei 5, No. 2, 89-101 (1956).—Rainwater was condensed and the activity measured in standard flat glass containers, with a thin window Geiger-Müller counter. The geometry was 12.6% ^{238}U ; was used as a β -standard. A Pb shield, 4 cm. thick, prevented the γ -rays from entering the Geiger-Müller tube. The collected samples showed at certain times a considerable increase in radioactivity, which could be correlated with the detonation of atom bombs in Nevada, May and June, Montebello, October, and Marshall Islands in November, 1952. Without having any precise information, it was surmised that the latter was a H bomb. The radioactivity, followed for a long time, showed several half-lives. S. and B. suggest that they are due to fission products, from the chain reaction, which started the bomb. The av. intensity of the radioactivity was 10^{-11} c. in rainwater fallen on a surface of 0.02 sq. cm. From the time of observation, intensity of the radioactivity, and the distance from the site of detonation, S. and B. attempted to calc. the velocity of wind and the uniform distribution of radioactivity in the atm. E. Rona

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SB
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AP

SZALAY, S.; BERENYI, JR.; D.

Thermonuclear nucleus processes and the hydrogen bomb. p. 145. Vol. 6, No. 5
Sept. 1956. FIZIKAI SZEMLE. Budapest, Hungary.

SOURCE: East European List, (EEAL) Library of Congress Vol. 6, No. 1
January 1956.

SZALAY SANDOR

HUNGARY/Analysis of Inorganic Substances

G-2

Abs Jour: Ref Zhur-Khimiya, No 6, 1957, 19581

Author : Sandor Szalay, Gyula Almassy

Inst : Hungarian Academy

Title : Analytical Study of Home Coals; Determination of Uranium Contents.

X Orig Pub: Magyar Tud. Akad. Kem. Tud. Oszt. Közl., 1956,
8, No 1, 33 - 38.

Abstract: Radiological measurements show increased radioactivity in the Volentsei and Mochek mountains as compared with the mean activity of the Earth's crust. The analytical study of coals of various origins show that their radioactivity is caused basically by U; the Th content is insignificant

Card 1/2

- 56 -

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

J-8

Abs Jour : Referat Zhur - Khimiya, No 2, 1958, 5804

Abstract : was evaporated to dryness and the dry residue oxidized with concentrated HNO_3 . Determination of V is based upon the fact that the resulting product of oxidation is capable of oxidizing, in the presence of oxalate ions, aniline to products of blue-green color. Analysis of Mo in coal ash (less than 0.01%) was conducted by the chromatographic method of Almassy-Straube. 0.5-1 g of ash were mixed in a platinum crucible with HCl and HF, HCl (acid) was added to the resulting solution, the solution was evaporated to dryness, residue dissolved in 1 ml concentrated HCl with addition of a small amount of distilled water. Mo was determined in the solution so obtained. It was found that if the ash-containing portion is separated from the coal the coal is substantially enriched in Mo and V; consequently these components are associated with the organic matter of coal.

Card 2/2

~~Szalay~~ SZALAY, S

Distr: 4E2c

27
✓ Fluorimeter for the determination of uranium. György MálhÉ and Sándor Szalay, *Magyar Fiz. Folyóirat* 5, 247-50(1957).—A bead consisting of a mixt. of UF₆ and NaF was irradiated with ultraviolet light. The fluorescent

light of U was projected with the help of a strong lens through a filter, to the photocathode of an electromultiplier tube. A standard of known U content was used to det. the concn. of the sample. The intensity of the fluorescence was found to be proportional to the U concn. between 10⁻⁴ and 10⁻¹³ g. U. E. Ronn

RU OH

SANDOR, SZALAY

HUNGARY/Nuclear Physics - Installations and Instruments. Methods of Measurement and Research C-2

Abs Jour : Ref Zhur - Fizika, No 7, 1958, No 14985

Author : Bujdosó Erno, Medveczky László, Száláy Sandor
Inst : Not Given
Title : Investigation of Radioactivity of Coal Ash by the Photo-emulsion Method

Orig Pub : Magyar tud. akad. Mat. es fiz. tud. oszt. kozl., 1957, 7, No 2, 129-135

Abstract : The purpose of the work consisted of determining the concentration of uranium in grains of ash obtained when burning coal containing uranium. The results of the investigations, carried out by the photoemulsion method, have shown that in most cases the uranium fuses with the ash into small spheres of definite diameter and density, and the average contents of pure uranium in these spherical grains of ash reaches 0.65% approximately.

Card : 1/1

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SANDOR, SZALAY

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

Abs Jour : Ref Zhur - Fizika, No 7, 1958, No 14941

Author : Csikai Gyula, Hrehuss Gyula, Száláy Sandor
Inst : Not Given
Title : Precision Automatic Cloud Chamber

Orig Pub : Magyar tud. akad. Mat. es fiz. tud. oszt. kozl., 1957, 7, No 2, 137-144

Abstract : Detailed description of a cloud chamber constructed in the Debrecen Institute of Nuclear Physics (Hungary).

Card : 1/1

Calculations concerning the difficulties of producing controlled fusion energy. Sandor Szalay and Dénes Berényi. Magyar Tudományos Akadémia. Fiz. Osztályának Közleményei 8, 345-83(1958).--The feasibility of thermonuclear reactors and their parameters are discussed. The conclusion is that the production of continuous, regulated, and economic thermonuclear energy is extremely difficult at the present time. If one considers extreme high ds. (0.1 g./cc.) one obtains such high radiation losses that the crit. dimensions necessary for equil. are prohibitively large. At the plasma ds. used in recent expts., the radiation losses are lower but the production of fusion energy is even lower. Disregarding for a moment the difficulties of obtaining extremely high equil. temps. and controlled production, a thermonuclear reactor could be planned by using low plasma ds. which would have long life and fusion would not occur explosively. The extremely large vol. for low d., however, is a big difficulty. If it is not possible to produce controlled fusion energy, the authors consider the conditions to obtain at least detectable effects. The limit of detection is 100 fusions/l.; this condition has not been established as yet. E. Roma

3
4E3c
4E3d
1-R8

RME

AUTHORS: Szalay, S., Bereányi, D. SOV/48-22-7-23/26

TITLE: Toroidal Sector Type Beta Ray Spectrometer (β -Spektrometr toroidal'no-sektornogo tipa)

PERIODICAL: Izvestiya Akademii nauk SSSR, Seriya fizicheskaya, 1958, Vol. 22, Nr. 7, pp. 877-878 (USSR)

ABSTRACT: This is a brief note concerning the toroidal spectrometer constructed at the Institute of Nuclear Research of the Hungarian Academy of Sciences, the first communication having been made in reference 1. The focusing principle is given. The toroidal coil core is a ring divided into 42 segments by means of 42 gaps with parallel walls. The pole lines at the electron entrance and exit are curved. A spherical lens aberration was avoided through an appropriate design. The magnet coil embraces the core segments in such a way that the gaps for the passage of the electrons remain free. The whole spectrometer is placed in a vacuum chamber. On the one side of the spectrometer, at the axis of symmetry, there is the sourceholder, on the other side, situated symmetrically, is the anthracene crystal which is connected to the photomultiplier cathode. The focusing properties were

Card 1/2

Toroidal Sector Type Beta Ray Spectrometer

SOV/48-22-7-23/26

tested by means of an Agfa Texo-R X-ray film, and with the isotopes Th(B+C) and Cs¹³⁷. According to the preceding Cs¹³⁷ measurements, the line half-width was about 3-4 %, and the luminous intensity - 2,5 %. These properties are shown by all ordinary lenses. The spectrometer under consideration has some new, valuable features: 1) As measurements have shown, there is no magnetic field at the points where the source and the detector are. 2) Operation of the spectrometer requires very low current intensities, not more than 3 Amps. 3) The design does not call for lenses separating electrons from positrons. This, and especially the first property, permits to investigate the β - γ , e^- - γ , and e^- - β -coincidences with this spectrometer. The equipment needed is already under construction at the Institute, and is being adjusted. There are 3 figures and 1 reference, 0 of which is Soviet.

ASSOCIATION: Institut yadernykh issledovaniy Vengerskoy Akademii nauk
(Institute of Nuclear Research of the Hungarian Academy of Sciences)

Card 2/2

SZALAY, S; BERENYI, D; SR.

Split products in atmospheric condensation between 1952 and 1957. p. 175

MAGYAR TUDOMANYOS AKADEMIA. MATEMATIKAI ES FIZIKAI OKZTALY. KOZLEMENYEI.
Budapest, Hungary. Vol. 9, no. 2, 1959

Monthly list of East European Accessions (EEAI). II. Vol. 9, no. 1, Jan.,
1960

Uncl.

SZALAY, Sander

The discovery of artificial radioactivity and its effect on the
progress of scientific research. *Magy.tud.* 66 no.11:565-570 N '59.
(REF ID: A6194)

1. Lev.tag, Magyar Tudományos Akademia, Budapest.
(Radioactivity)

ANGELI, Istvan; SZALAY, Sandor, egyetemi tanar; CSONGOR, Eva, docens;
MATHE, Gyorgy, tudomanyos munkatars

Investigations on the function of excitation concerning Na^{23} ,
 p^{26}/Mg nuclear reaction. ATONKI kozl 2 no. 3:199-204 '60.

1. Magyar Tudomanyos Akademia levelezo tagja; Magyar Tudomanyos Akademia Atommag Kutato Intezete igazgatoja, Debrecen; "ATOMKI Kozlomenyek" felelos szerkesztoje es felelos kiadoja (for Szalay).
2. Kiserleti Fizikai Intezet, Debrecen (for Csongor).

SZALAY, Sandor, egyetemi tanar

Plans for meteorite research in the Institute of Nuclear
Research in Debrecen. ATOMKI közl 2 no. 3:205-206 '60.

1. Magyar Tudományos Akademia levelezo tagja; Magyar Tudományos
Akademia Atommag Kutato Intezete igazgatoja, Debrecen; "ATOMKI
Kozlemenyek" felelos szerkesztoje es felelos kiadoja.

SZALAY, Sandor

Effect of pollution on water resources due to nuclear engineering.
Hidrologiai kozlony 40 no.4:293-299 Ag '60.

1. Magyar Tudomanyos Akademia levelezo tagja; Magyar Tudomanyos
Akademia Atommag Kutato Intezetenek igazgatoja, Debrecen.

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B122/B227

50100
AUTHORS:

Szalay, Sándor, Gyarmati, Borbála, Kovách, Ádám, Sámsoni,
Zoltán

TITLE:

Meteorites as means of space exploration

PERIODICAL:

Fizikai Szemle, no. 8, 1961, 227-232

TEXT: The purpose of the paper is to outline the present state of physical knowledge on meteorites. The isotope-analytical laboratory of the Nuclear Research Institute of the Hungarian Academy of Sciences, with which the authors are associated, has planned to investigate the meteorite stock of Hungarian museums in order to contribute to international research on this matter. (I) General characteristics of meteorites: In the course of the International Geophysical Year, in 1959, an estimated amount of 14 million tons of cosmic substance fell on the earth's surface. Meteorites are classed into three groups, analogous to the three principal zones building up the earth: siderites (mainly Fe-Ni alloys), siderolites (Fe-Ni alloys and silicates), and aerolites (prevalently silicates). H. Brown compiled tables on the frequency of chemical elements found in the three groups.
Card 1/3

X

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B122/B227



Meteorites as means of space ...

H. C. Urey and H. Craig investigated the same on chondrules, a globular variety of the third group with a higher Fe content. (II) Isotope composition of the substance of meteorites: Elemental and isotope composition irregularities in connection with the origin of meteorites. So far, it has been found that most elements in meteorites have an isotope composition identical to that found for the same elements on the earth. This fact supports the general opinion of astronomers that meteorites originate, without exception, from the solar system. Thus, isotope irregularities can not be attributed to the particular origin of meteorites. Physico-chemical and biological fractionating effects on the substance of meteorites do not differ essentially from similar effects on terrestrial substances. External nuclear-physical effects: Meteorites have been exposed to cosmic radiation perhaps for hundreds of millions of years. Nuclear-physical emulsions exposed to cosmic radiation presented the phenomenon of nuclear cascade, the nucleons of which quit the nucleus with high energy, leaving it in a strongly excited state. When thermodynamical equilibrium has been attained, the strongly heated nucleus begins to evaporate. In the isotope composition of elements produced by such evaporation, strong differences of isotope composition are found against their terrestrial composition.

Card 2/3

26313

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B122/B227

Meteorites as means of space ...

Investigations by Paneth and co-workers (1953), Nier and co-workers (1958) have evidenced that helium isotopes are produced in meteorites by cosmic radiation. Gentner and Zähringer (1955) first traced back the presence of argon in meteorites to cosmic radiation. Besides cosmic radiation, other radiations may be present in the solar system. The authors do not think that the neutrino flux from the sun could have affected the isotope composition of meteorites to a larger extent than it has affected the substance of the earth. Simple estimates also show that the presence of neutron radiation from the sun is improbable. Internal nuclear-physical effects: The simpler history of the development of meteorites in relation to terrestrial conditions has led H. Brown to suggest a method of estimating the age of elements by isotope analysis of certain elements in two different phases of meteorites (metallic Fe-Ni silicate, or metallic Fe-Ni sulfide, etc.). There are 1 figure and 3 tables.

ASSOCIATION: MTA Atommag Kutató Intézet, Debrecen (Hungarian Academy of Sciences, Nuclear Research Institute, Debrecen)

Card 3/3

BRUCHER, Erno; SZALAY, Sandor, dr., egyetemi tanar; VERESS Zoltanne,
intezeti onallo laborans

Linkage of quadrivalent uranium U/IV/ on humus substances.
ATOMKI kozl 3 no. 1:11-15 '61.

1. Magyar Tudomanyos Akademia levelezo tagja; Magyar Tudomanyos Akademia Atommag Kutato Intezete igazgatoja; "ATOMKI Kozle-
menyek" felelos szerkesztoje es felelos kiadoja, Debrecen (for Szalay).

SZALAY, Sandor (Debrecen); SZILAGYI, Maria (Debrecen)

Investigations of the adsorption of some uranium fission products
on a humus preparation. Mat kozl MTA 11 no.1:47-55 '61. (KEA 10:6)

1. A Magyar Tudományos Akademia Atommag Kutato Intezete, Debrecen.
(Adsorption) (Uranium) (Fission products)
(Humus) (Radioisotopes) (Cations)

DEZSI, Zoltan; SZALAY, Sandor, dr., prof.; BANHALMI, Jozsef

An emanometer for determining the radium emanation content of natural waters. ATOMKI kozl 4 no.1:51-55 My '62.

1. Magyar Tudomanyos Akademia levelezo tagja, es a Magyar Tudomanyos Akademia Atommag Kutato Intezete igazgatoja, Debrecen (for Szalay).

SZALAY, Sandor, dr.

Discovery of artificial radioactivity and its effect on the development of scientific research. Fiz szemle 10 no.3:67-71 Mr '60.

1. Magyar Tudományos Akademia levelezo tagja.

SZALAY, Sandoz, dr. (Debrecen)

Radioactive substances in the atmosphere and in the natural waters.
Fiz szemle 10 no.4:101-105 Apr '60.

SZALAY, Sandor, dr., egyetemi tanar

Binding of nuclear fission products on humic acids and the possibility of applying this phenomenon in nuclear engineering. ATOMKI kozl 5 no.1:3-16 My '63.

1. Magyar Tudomanyos Akademia levelezo tagja; Magyar Tudomanyos Akademia Atommag Kutato Intezete Igazgatoja, Debrecen; "ATOMKI Koslemenyek" felelos szerkesztoje es felelos kiadoja.

SZALAY, Sandor, prof.

Role of humic acids in the geochemistry of uranium and their possible role in the geochemistry of other cations. Mat kosl MTA 13 no.3:253-268 '63.

1. Magyar Tudomanyos Akademia Atomnag Kutato Intezete, Debrecen.

SZALAY, Sándor

Professor Gyulai as teacher. Fiz szemle 13 no.5:143-144 My '63.

1. Kossuth Lajos Tudományegyetem, Debrecen.

SZALAY, Sandor, egyetemi tanar; AIMASSY, Gyula; PESTY, Laszlo;
LOVAS, Istvan

Surevy of certain more important coal fields in Hungary for
locating uranium traces. ATOMKI kozl l no. 1:7-26 '59.

1. Magyar Tudomanyos Akademia levelezo tagja; Magyar Tudomanyos
Akademia Atommag Kutato Intezet igazgatoja, Debrecen; "ATOMKI
Kozlemenyek" felelos szerkesztoje es felelos kiadoja (for
Szalay).

SZALAY, Sandor, egyetemi tanar; PUSKAS, Emil; KOLTAY, Ede; FELSZERFALVI, Janos

Van de Graaff generator with two million voltage. ATOMKI kozl
2 no.1:3-14 '60.

1. Kossuth Lajos Tudomanyegyetem Kiserleti Fizikai Intezete,
Debrecen.

2. Magyar Tudomanyos Akademia livelezo tagja; Magyar
Tudomanyos Akademia Atommag Kutato Intezete igazgatoja;
"ATOMKI Kozlemenyek" felelos szerkesztoje es felelos
szerkesztoje es felelos kiadoja (for Szalay).

SZALAY, Sandor; SCHERF, Emil

Uranium traces in the waters of the foreground of the Tokaj-Eperjes Mountains. ATOMKI kozl 2 no. 2:71-98 '60.

1. Magyar Tudomanyos Akademia levelezo tagja; Magyar Tudomanyos Akademia Atommag Kutato Intezetenek igazgatoja, Debrecen; "ATOMKI Kozlemenyek" felelos szerkesztoje es felelos kiadoja (for Szalay).

SZALAY, Sandor, egyetemi tanar; ANGELI, Istvan

Laboratory experiments for the pre-enrichment of uranium in coal ash. ATOMKI kozl 2 no. 2:145-154 '60.

1. Magyar Tudomanyos Akademia levelezo tagja ; Magyar Tudomanyos Akademia Atommag Kutato Intezetenek igazgatpja, Debrecen; "ATOMKI Kozlemenyek" felelos szerkesztoje es felelo kiadoja (for Szalay).

KOVACH, Adam; SZALAY, Sandor, egyetemi tanar

Determination of the point of time for experimental atomic bomb explosions on the ground of atmospheric radioactivity. ATOMKI kozl 2 no. 3:229-236 '60.

1. Magyar Tudomanyos Akademia levelezo tagja; Magyar Tudomanyos Akademia Atommag Kutato Intezete igazgatoja, Debrecen; "ATOMKI Kozlemenyek" felelos szerkesztoje es felelos kiadoja (for Szalay).

SOMORJAI, Endre; SZALAY, Sándor, dr. prof.; RAKOSI, Miklósné, dr.,
tudományos munkatárs

Determining the thickness of carbon films on the basis of
measuring optical density. ATOMKI közl 5 no.2: 103-106 '63

1. Magyar Tudományos Akadémia Atommag Kutató Intézetének igaz-
gatója, Debrecen; Magyar Tudományos Akadémia levelező tagja;
"ATOMKI Közlemények" felelős szerkesztője és felelős kiadója
(for Szalay). 2. Kossuth Lajos Tudományegyetem Szerves Kémiai
Tanszék, Debrecen (for Rakosi).

SZALAY, Sandor, dr., egyetemi tanar; SCHADEK, Janos

Crystal cutting device.ATOMKI kozl 5 no.2:123-124 '63

1. Magyar Tudomanyos Akademia Atommag Kutato Intezete igazgatoja, Debrecen; "ATOMKI Kozlemenyek" felelos szerkesztoje es felelos kiadoja.

SZALAY, Sandor; SZILAGYI, Maria

Retardation of fission products by peat humic acids, a new possibility for sewage water control. Fiz szemle 15 no.12: 388-391 D '64.

1. Nuclear Research Institute of the Hungarian Academy of Sciences, Debrecen.

GEHER, Katalin, dr.; SZALAY, Veronika, dr.

Chylothorax and chylous ascites secondary to a retroperitoneal tumor. Orv.hetil. 102 no.30:1421-1422 23 J1 '61.

1. Borsod megyei Szeemmelweis Korhaz, I. Belgyogyaszati Osztaly.

(CHYLOTHORAX etiol) (CHYLOPERITONEUM etiol)
(RETROPERITONEAL SPACE neopl)

GEHER, Katalin, dr; SZALAY, Veronika, dr.

Paradoxical embolism originating from peripheral thrombi.
Orv.hetil. 102 no.36:1705-1706 3 S '61.

1. Borsod megyei Semmelweis Korház, I. sz. Belosztaly.

(VASCULAR DISEASES PERIPHERAL case reports)
(EMBOLISM case reports)
(THROMBOSIS case reports)

SZALAY, Zoltan

Development of gas service in our cities having gas supply.
Epuhetgeszeszet 11 no.5:163-165 0 '62.

BALINT, Peter,; LASZLO, Katalin,; SZALAY, Zsuzsanna.

Nervous regulation of tubular sodium reabsorption. Kiserletes
orvostud. 7 no.6:610-623 Nov 55.

1. Budapesti Orvostudományi Egyetem Mlettani Intezete.

(KIDNEYS, physiol.

nerv. regulation of tubular reabsorp. of sodium &
water in innervated & transplanted kidneys in dogs
(Hun))

(SODIUM, metab.

tubular reabsorp. in innervated & transplanted kidneys in
dogs, nerv. regulation (Hun))

(WATER, metab.

same)

BALINT, Peter.; FEKETE, Agnes.; SZALAY, Zsuzsanna.

Nervous regulation of the adaptation system of kidney function.
Kiserletes orvostud. 7 no.6:624-635 Nov 55.

1. Budapesti Orvostudományi Egyetem Elettani Intézete.

(KIDNEYS, physiol.

nerv. regulation of blood circ. & urine flow, eff. of
exper. hypotension in innervated & transplanted kidneys
in dogs (Hun))

(HYPOTENSION, exper.

eff. on nerv. regulation of blood circ. & urine flow in
innervated & transplanted kidneys in dogs (Hun))

SZALAY-MARZSO, I.

Investigation of the relationship between nutritive plants and the vitality
of Hyphantria cunea Drury. p.45.
KOZLEMENYEI, Budapest. Vol. 8, No. 1/2, 1955

SOURCE: EEAL Vol. 5, No. 7, July 1956.

BALINT, Peter; KISS, Eva; SZALAY, Zsuzsanna

Data on the measurement of glomerulus filtration in dogs.
Kiserletes orvostud. 8 no.5:539-547 Sept 56.

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(KIDNEY FUNCTION TESTS
endogenous & exogenous chromogen & creatinine & inulin
clearance tests, measurement methods in dogs. (Hun))

KISS, Eva; SZALAY, Zsuzsanna

Determination of alkali-resistant inulin. Kiserletes orvostud.
8 no.5:552-553 Sept 56.

1. Budapesti Orvostudományi Egyetem Élettani Intézete. 113
(INULIN, determ.
alkali-resistant inulin in blood & urine (Hun))

BALINT, P.; LASZLO, K.; SZALAY, Zs.

The nervous regulation of sodium reabsorption in renal tubules.
Acta physiol. hung. 10 no.2-4:247-262 1956.

1. Institute of Physiology, University School, Budapest.
(KIDNEYS, physiol.
tubular reabsorp. of sodium, nervous regulation in
dogs)
(NERVOUS SYSTEM, physiol.
regulation of sodium reabsorp. in renal tubules in
dogs)

EXCERPTA MEDICA Sec.2 Vol.10/6 Phy.Biochem. June 57

2598. BÁLINT P., FEKETE Á. and SZALAY Zs. Inst. of Physiol., Univ. Med. Sch., Budapest. *The nervous regulation of renal adaptation
ACTA PHYSIOL. ACAD. SCIENT. HUNG. (Budapest) 1956, 10/2-4 (263-276)
Tables 6

The response of innervated and denervated-transplanted kidney to a decreased blood pressure has been investigated. The innervated kidney responded to bleeding by vasoconstriction, while the denervated kidney remained unaffected. However, they both responded to clamping of the aorta. Dicker - London

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SZALAY, Zsuzsanna

HUNGARY/Human and Animal Physiology - Excretion.

V-6

Abs Jour : Ref Zhur - Biol., No 4, 1958, 18266

Author : Peter Balint, Eva Kiss and Zsuzsanna Szalay

Inst : -

Title : The Amount of Blood Flowing Through the Kidney in Dehydration and Osmotic Diuresis.

Orig Pub : Kiserl. orvostud., 1957, 9, No 2, 191-197

Abstract : Among dogs which were oliguric after 12 to 48 hours without water, determinations were made of renal clearance of inulin, creatinine and PAH and of the extraction of these substances from the blood flowing through the kidneys. The calculated effective flow of plasma through the kidneys according to the clearance value was less than when a direct determination was made in the presence of polyuria produced by an infusion of mannitol. The difference obtained in the case of oliguria is explained the accumulation in the kidneys of the substances used to determine clearance during oliguria.

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SZALAY, Zs.

BALINT, P.; KISS, M.; SZALAY, Zs.

On the measurement of glomerular filtration rate in the dog. Acta physiol. hung. 12 no.1-3:125-136 1957.

1. Physiological Institute, Medical University, Budapest.
(KIDNEYS, physiol.
glomerular filtration rate, measurement in dogs.)

BALINT, Peter; FEKETE, Agnes; STURCZ, Jozsef; SZALAY, Zsuzsanna, *technikai segedletevel*

Blood circulation and renal function in post-hemorrhagic hypotonia. *Kiserletes. Orvostudomány 12 no.1:20-26 F '60.*

1. Budapesti Orvostudományi Egyetem *Élettani Intézete.*
(HYPOTENSION exper)
(KIDNEYS physiol)

SZALAY-MARZSO, L.

HUNG.

✓ Control of *Hyphantria cunea*, Brutz. C. Reichart and L. Szalay-Marzás (*Acta agron. hung.*, 1951, 4, 279-312).—Spraying of nut-berry trees with a 10% oil emulsion containing up to 10% of DDT is more effective than dusting, and also kills adult larvae. Control should, however, be directed as far as possible against larval populations when in the less developed and more susceptible stages.

P. S. ARUP.

SZALAY-MARZSO, L.

Data on the habits in Hungary of Cryptorrhyncus lapathi L. and the protection tests against it. p. 314.

AZ ERDO. (Orszagos Erdeszeti Egyesulet) Budapest, Hungary, Vol. 8, No. 8, Aug. 1959

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

SZALAY-MARZSO, Laszlo, dr.

Natural insect enemies of aphids. Term tud kozl 7 no.3:110-113 Mr '63.

1. Novenyvedelmi Kutatointezet, Budapest.

P/012/59/004/03/09/020

AUTHORS: Chrzęszczewska, A.; Szalecki, W.; Kirkor, W.; Dawid, W.

TITLE: Esters of Carboxylic Acids of 2-Hydroxyethyl-Amines and its Derivatives. III. Synthesis of Hydrochloride of Triethanolamine Tri-o-Chlorobenzoate

PERIODICAL: Societas Scientiarum Lodziensis Acta Chimica, 1959, Vol 4, pp 85 - 87

TEXT: While investigating the action of acid chlorides on triethanolamine, a new compound, the hydrochloride of triethanolamine of tri-o-chlorobenzoate was obtained. It was not described yet in chemical scientific literature. It crystallizes in the form of colourless plates with 97-98°C melting temperature. It dissolves easily in acetone, methanol and ethanol, sparingly in benzene and in water and is not soluble in ether. Quantitative analysis and molecular weight are in agreement with theoretical figures.

ASSOCIATION: Katedra Chemii Organicznej Uniwersytetu Łódzkiego (Lodz University, Department of Organic Chemistry)

PRESENTED: March 14, 1959

LA

Card 1/1

SZALEGA, Albin

The ability of guinea pigs (*Cavia porcellus* L.) to notice optical illusions. *Prace zool* no.3:113-139 '63 [publ. '64].

1. Department of Animal Psychology and Ethology of the Jagiellonian University, Krakow. Head: prof R.J.Wojtusiak.

SWIECKI, M.; SZALEK, M.

K^+ -proton scattering in a case of scalar coupling. Bul Ac Pol mat 8
no.11/12:807-810 '60.

1. Institute of Physics, Polish Academy of Sciences, and Institute
of Theoretical Physics, University, Warsaw. Presented by W. Rubnowicz.

(Protons)

[POLAND

PIATKOWSKA, Hanna and SZALEK, Michalina, Laboratory of the Veterinary Sanitary Inspection Service (Laboratorium Weterynaryjnej Inspekcji Sanitarnej) in Warsaw (Science director: Prof. Dr. Jan HAY)

"Rate of Multiplication of Erysipelothrix Insidiosa in Muscle Tissue."

Warsaw-Lublin, Medycyna Weterynaryjna, Vol 19, No 3, Mar 63, 145-146.

Abstract: Authors carried out an investigation to determine the rate of spread of Erysipelothrix insidiosa on contact and the rate of its penetration into muscle tissue. They found that contact with infected muscle produces contamination within the hour, and with infected animal organs in half this time. Depth of penetration reaches 20 mm in 24 hours, results being unaffected by temperature. Authors strongly recommend all possible sanitary and sterilization precautions in all phases of handling the meat. There are no references.

[1/1

SZALEK, R., mgr inż.

Measurement of the light flux of a fluorescent lamp by
indirect method. Pomiar 8 no.8:399-401 Ag '62.

SZALEWICZ, B.

"Land allotment for protective forest strips in the Soviet Union." p. 19.
(Przegląd Geodezyjny. Vol. 9, no. 1, Jan. 1953. Warszawa.)

SO: Monthly List of East European Accessions, Vol. 3, No. 2, Library of Congress,
Feb. 1954, Uncl.

POLAND

SZALINSKI, Antoni, Lek. wet., PZLZ [Panstwowy Zaklad Lecznicy dla Zwierzat, State Animal Hospital] in Malbork

"Case of Displaced Abomasum in a Cow Toward the Left Side."

Warsaw-Lublin, Medycyna Weterynaryjna, Vol 18, No 11, Nov 62, p 658.

Abstract: Symptoms are described for a cow which led to a diagnosis of susp. reticulo-peritonitis, for which surgery was recommended. The laparectomy revealed a displaced abomasum, distended and twisted. Attempts to correct the condition failed. No references.

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SZALINSKI, J.

"Mechanization of repairs of Martin furnaces." p. 25, (HUTNIK, Vol. 29, no. 1, Jan. 1953, Katowice, Poland)

SO: Monthly List of East European Accessions, Vol. 2, #8, Library of Congress
August, 1953, Uncl;

SZALINSKI, J.

Szaliński J. Time Factor Improvement in Operating Open-Hearth Furnaces by Cutting Down the Time Taken up by Periodical Repairs and General Overhaul. MG

„Zwiększenie współczynnika wykorzystania czasu pieca martenowskiego przez przyspieszenie remontów okresowych i kapitalnych”. Hutnik. No. 12, 1954, pp. 385—390, 3 tabs.

Classification of repairs to open-hearth furnaces, review of means to curtail the time involved in such repairs, and plan for organising repairs. The author quotes effective Polish standards for: classifying repairs to open-hearth furnaces, harmonogram of complete overhaul and of intermittent repairs carried out between shifts. The author considers it advisable, with a view to curtailing the time involved in repairs and overhaul, to mechanise the tasks of breaking down the furnace lining and the chipping away of slag, as also the transport of rubble and refractories. A problem given special attention is the call for classifying the various types of furnaces — which involves standardisation of the shapes of refractory bricks.

D J

SZALINSKI, L.

Time Factor in Operating Open-Hearth Furnaces Improved
by Cutting the Time for Periodical Repairs and Overhauling.
Col. Szalinski. (*Hutnik*, 1954, 21, (12), 385-390). [In Polish].
The organization of repairs and overhauls of O.H. furnaces
is described.—v. o.

of

SZALKAI, Arpad

Application of standard designs. Magyar ipar 10 no.8:339-342 '61.

SZALKAI, Ferenc

Our new Kossuth-prize winner physicist. Fiz szemle 12 no.9:290
S '62.

1. "Fizikai Szemle" szerkeszto bizottsagi tagja.

SZALKAI, Geza, kozegeszsegktan-jarvanytan szakorvosa

Cooperation between the Public Health and Medical Clinic for
Contagious Diseases and the County Council of Trade Unions.
Munka 13 no.8:19 Ag '63.

1. Nograd megyei allami kozegeszsegugyi felugyelo.

SZALKAI, GY.

"Reconstruction of Thermoelectric Plants", P. 291, (MAGYAR ENERGIAGAZDASAG, Vol. 7, No. 7, July 1954, Budapest, Hungary)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 3, No. 12, Dec. 1954, Uncl.

SZALKAI, GY.

New West-German power plants and some technical establishments applied there and worthy of our attention. p. 580

ENERGIA ES ATOMTECHNIKA. (Energiagazdalkodási Tudományos Egyesület)
Budapest Hungary

Vol. 11, no. 9/10, Sept./Oct. 1958

Monthly list of East European Accessions (EEAI) LC., VOL. 8, no. 7, July 1959

Uncl.

SZALKAI, Gyorgy

"Handbook for engineers" by Dr. W. Kretschmer. Reviewed by Gyorgy Szalkai. *Energia es atom* 13 no.1/2:65 Ja-F '60.

SZALKAI, Gyorgy

"Economic trends in the electric power production of the Edison system in Detroit" by G.A.Porter and D.E.Hart. Reviewed by Gyorgy Szalkai. Energia es atom 13 no.4/5:155 Ap-May '60.

1. EROTERV.

SZALKAI, Gyorgy

Application of gas turbines in peak-load power plants. Energia es
atom 13 no.4/5:169-170 Ap-May '60.

1. EROTERV.

SZALKAI, Gyorgy

"Thermodynamical properties of water and water vapor" by
M.P. Vukalovich. Reviewed by Gyorgy Szalkai. Energia es
atom 14 no.3:144 Mr '61.

SZALKAI, Gyorgy, okleveles gepeszmernok

Eduction-condensation turbine with damaged vacuum. Ipari
energia 3 no.8:174-176 Ag '62.

SEALKAI, I.

SEALKAI, I. Methods for calculating material standards in making wood patterns.
p. 132.

Vol. 10, No. 8, Aug. 1955.

FCHASZATI IAPCK

TECHNICLCCY

Budapest, Hungary

So: East European Accession, Vol. 5, No. 5, May 1956

SZALKAI, I.

Computing methods for subsidiary materials used in foundries. p.43. (Kohaszati Lapok.
Budapest. Ontode. Vol. 7, no. 2, Vol. 11, no. 2, Feb. 1956.)

SO: Monthly List of East European Accessions (EEAL) LC., Vol. 6, no. 7, July 1957 Uncl.

SZALKAY, Jozsef

Elements of plants. Elet tud 16 no.29: Suppl. Tarkatudomány 2 no.15:
116-117 16 J1 '61.

SZALKAY, Jozsef

Are there still unknown species of animals? Elet tud 16 no.35:1095-
1097 27 Ag '61.

SZALKAY, Jozsef

Evolution of blood circulation. Elet tud 16 no.42:1320-1323 15 0
'61.

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SZALKAY, Jozsef

"Underwater life" by Dr. Gyorgy Lanyi. Reviewed by Jozsef Szalkay.
Elet tud 17 no.7:205 F '62.

SZALKAY, József

Ant lion: a strange animal of prey. Elst tud 17 no.30:949-952
29 JI 62.

SZALKAY, Jozsef

Gopher. Elet tud 17 no.43:1376 28 0 '62.

SZALKAY, Jozsef

Pictures from the life of African insects. Hlet tud 18 no.10:311-314
10 Mr '63.

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The Persian cat. Elet tud 18 no.41:1306 13 0 '63.

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Lemur in the Zoological Garden. Elet tud 18 no.43:1376
27 0 '63.