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L 23523-65 EWT(1)/EEC(t) Peb IJP(c)
ACCESSION NR: AP4046667 S/0185/64/009/009/1031/1032

AUTHOR: Broude, V. L.; Vil'chy*ns'ka, L. P.; Sal'kova, K. M.; Soskin, M. S.

TITLE: Characteristics of the stimulated Raman scattering in benzene

SOURCE: Ukrayins'ky*y fizy*chny*y zhurnal, v. 9, no. 9, 1964, 1031-1032

TOPIC TAGS: stimulated Raman scattering, ruby laser, benzene light scattering, laser

ABSTRACT: The authors achieved a stimulated combination scattering (Raman scattering) in liquid benzene by placing the cell in front of a ruby laser between two dielectric mirrors (reflection coefficient for the 6200 to 7500 Å region 99.5%). The energy of the flashes of the laser pumped with two lamps of the IFP-type, was about 3.5 kj. The light from the laser and from the benzene cell was dispersed with a monochromator and the spectrum observed with a photomultiplier and an oscillograph. Two spectra were registered, one from the ruby laser, the other from the stimulated Raman scattering in benzene. Orig. art. has: 2 figures.

Card 1/2

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"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001446910002-4

L 23523-65

ACCESSION NR: AP4046667

ASSOCIATION: Instytut fizyky AN URSR, Kiev (Institute of Physics, AN URSR)

SUBMITTED: 25May64 ENCL: 00

SUB CODE: EC, OP NO REF SOV: 001 OTHER: 006

Card 2/2

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001446910002-4"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001446910002-4

L 28378-66 EEC(k)-2/EWA(h)/EWP(j)/EWP(k)/EWT(1)/EWT(m)/FBD/T IJP(c) GG/RM/ WH/WG/WW

ACC NR: AP6016053 SOURCE CODE: UR/0185/66/011/005/0569/0570

50
B

AUTHOR: Broude, V. L.; Pohorets'kyy, P. P.; Sal'kova, K. M.; Soskin, M. S.

ORG: Institute of Physics, AN URSR, Kiev (Instytut fizyky AN URSR)

TITLE: Stimulated Raman scattering of light by benzene in the dispersion resonator of a ruby laser

SOURCE: Ukrayins'kyy fizychnyy zhurnal, v. 11, no. 5, 1966, 569-570

TOPIC TAGS: Raman scattering, ruby laser, laser emission

ABSTRACT: An investigation was made of stimulated Raman scattering (SRS) by benzene in the dispersion resonator (see Fig. 1) of a ruby laser. In a resonator with two heavy flint glass prisms, the angular separation of the ruby emission and the Raman scattering at a frequency of 992 cm^{-1} reached 2°. The transmittivity of the mirrors was approximately 5%. A container 15 cm long with glass windows was filled with pure benzene. Q-switching was achieved by using 10-mm-thick KS-18 glass in the resonator. The ruby radiation consisted of a series of separate pulses, each with an average power close to 10 kwatt/cm^2 and a length of 500 nsec, with pump level 30% above threshold. Intensive stimulated Raman scattering was observed in the dispersion resonator during ruby generation exceeding the threshold by 10—20%. It should be noted that SRS was observed when mirror 3 was unaligned and even when it was absent. Changes in the far zone of SRS and the ruby emission behind mirror 2 when the benzene-

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L 28378-66

ACC NR: AP6016053

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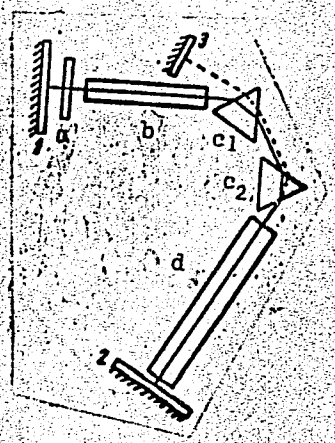

Fig. 1. Diagram of dispersion resonator

1, 2, 3 - Mirrors; a - KS-18 glass; b - ruby; c_1, c_2 - prisms; d - benzene-filled vessel.

filled vessel was turned up to 4° (in either the horizontal or vertical plane) showed that the direction of SRS generation does not depend on the orientation of the vessel and its windows and is always perpendicular to mirror 2. When the ruby generation threshold was exceeded by 30% the efficiency of the transformation of ruby emission into SRS approached 10%. Orig. art. has: 1 figure. [JA]

SUB CODE: 20/ SUBM DATE: 07Feb66/ ORIG REF: 001/ OTH REF: 001/ ATD PRESS: 4262

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APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001446910002-4"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001446910002-4

SAL'KOVA, YE. G.

USSR/ Agriculture - Biochemistry

Card 1/1 Pub. 22 - 40/62

Authors : Rubin, B. A., and Sal'kova, Ye. G.

Title : Dehydrase of apple tissues

Periodical : Dok. AN SSSR 102/3, 571 - 573, May 21, 1955

Abstract : Various types of early and late crop apples were investigated to determine the dehydrogenating activity of apple tissues. Results obtained showed that the dehydrogenatic activity ratio of alcoholdehydrase, dehydrase, malic and succinic acids is not constant, it changes considerably during the development and ripening of the fruit. Five references: 4 USSR and 1 English (1937-1954). Tables; graphs.

Institution : Acad. of Sc., USSR, the A. N. Bakh Inst. of Biochem.

Presented by: Academician A. I. Oparin, February 10, 1955

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001446910002-4"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001446910002-4

SALKOVA, E. G.

USSR / Cultivated Plants. Potatoes. Vegetables. Melons. M

Abs Jour : Ref Zhur - Biol., No 8, 1958, No 34680

Author : Salkova, E. G.
Inst : AS SSR
Title : Effect of Exposure to Radioactive Cobalt Co^{60} on the Content of Vitamin C in Potatoes.

Orig Pub : Dokl. AN SSSR, 1957, 114, No 4, 757-759

Abstract : Tubers of the potato varieties Lorkh and Priekul"skiy were exposed to radioactive cobalt (dosage 10,000 and 20,000 r) prior to storingin an experiment conducted by the Institute for Biochemistry of the Academy of Sciences SSSR. A decrease in the content of ascorbic acid, in comparison to control plants, was observed as early as 1½ hours after exposure (in the presence of 10,000 r : 20%); higher decreases resulted

Card 1/2

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"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001446910002-4

RUBIN, B.A.; SAL'ZOVA, Ye.G.

Some features of dehydrogenase activity in apple tissues. Biokhim. pl. i ovoshch. no.4:5-23 '58. (MIRA 11:10)

1. Institut biokhimii imeni A.N. Bakha AN SSSR.
(Apple) (Dehydrogenase)

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001446910002-4"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001446910002-4

SAL'KOVA, Ye. G.

AUTHORS: Sal'kova, Ye. G., Korableva, N. P. SOV/20-121-6-47/45

TITLE: On Certain Physiological and Morphological Changes in the Eyes of Potatoe Tubers Subjected to Irradiation (O nekotorykh fiziologicheskikh i morfologicheskikh izmeneniyakh v glazkakh kartofel'nykh klubney pod vliyaniyem oblucheniya)

PERIODICAL: Doklady Akademii nauk SSSR, 1958, Vol 121, Nr 6, pp 1097-1100 (USSR)

ABSTRACT: The X-ray and γ-irradiation of potatoes in doses of more than 5 000 roentgen hinders the germination of the tubers (Refs 1-4). When doses of more than 10 000 roentgen are applied it is completely suppressed. But also in this case the vegetation cone is not killed although the plant is deprived of the possibility of normal development (Refs 4-6). By irradiation also respiration is reduced according to the applied doses and the age of the plants: young plants show more reaction. This paper deals with the results of irradiation by radioactive cobalt. It was cytologically proved that even at 50 000 roentgen the vegetation cones remained alive. Table 1 shows that the eyes react upon irradiation by a change of the respiration intensity. The intensity of reaction depends on the dose. When a dose of 160 000 roentgen is applied the respiration decreases by more

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"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001446910002-4

SOV/20-121-6-42/45

On Certain Physiological and Morphological Changes in the Eyes of Potatoe Tubers Subjected to Irradiation

than 50%. Cytochemical differences in the distribution and the activity of ferments were revealed one month after the irradiation (Fig 1). Great differences are between the structure of irradiated eyes and those of control tubers (Fig 2). As a result of irradiation an alkalization of protoplasm colloids takes place. One of the characteristic features after an ended period of rest of the tubers is, however, the increased acidity of these colloids (Ref 8). Figure 3 shows that the isoelectric zone of the proteins is shifted towards the acid direction. This fact becomes most obvious at 10 000 roentgens. This implies a change of the intra-cellular pH-value. The greatest effect is obtained during the first 24 hours after irradiation (dose 10 000 roentgen). Thus the investigation showed that serious changes of several processes take place in the meristem of the tubers. The mentioned changes could not exhaust the whole complicated problem. Doubtlessly disturbances in the nucleinic metabolism are of great importance. At the moment the authors are dealing with this problem. S. [illegible] Rubio and [illegible] V. Metlitskiy directed the mentioned investigations.

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"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001446910002-4

SOV/20-121-6-42/45

On Certain Physiological and Morp ological Changes in t.e Eyes of Potatoe Tubers Subjected to Irradiation

There are 4 figures, 4 tables, and 8 references, 5 of which are Soviet.

ASSOCIATION: Institut biokhimii im. A. N. Bakha Akademii nauk SSSR (Institute of Biochemistry imeni A. N. Bakh, AS USSR)

PRESENTED: May 5, 1958, by A. I. Oparin, Member, Academy of Sciences, USSR

SUBMITTED: April 3, 1958

Card 3/3

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001446910002-4"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001446910002-4

RUBIN, B.A.; METLITSKIY, L.V.; SAL'KOVA, Ye.G.; MUKHIN, Ye.N.; KORABLEVA, N.P.; MOROZOVA, N.P.

Use of ionizing radiations to control dormancy in potato tubers during storage. Biokhim.pl. i ovoshch. no.5:5-101 '59. (MIRA 13:1)

1. Institut biokhimii imeni A.N.Bakha Akademii nauk SSSR.
(Plants, Effect of gamma rays on)
(Potatoes--Storage)

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001446910002-4"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001446910002-4

SALKOVA, YE.G., METLITSKIY, L.V., MUKHIN, YE.N, KORABLEVA, N.P.,

MOROZOVA, N.P., (USSR)

"Influence of y-Irradiation on Nuclear and Carbohydrate Metabolism in Storage Organs of Plants."

Report presented at the 5th Int'l. Biochemistry Congress, Moscow, 10-16 Aug 1961.

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001446910002-4"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001446910002-4

METLITSKIY, L.V.; SAL'KOVA, Ye.G.; MIKHEYEVA, A.V.

Characteristics of carbohydrate metabolism in potatoes. Izv. AN SSSR. Ser. biol. no.4:538-550 Jl-Ag '61. (MIRA 14:9)

1. Institut biokhimii im. A.N.Bakha AN SSSR.
(POTATOES) (CARBOHYDRATE METABOLISM)

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001446910002-4"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001446910002-4

RUBIN, B.A.; METLITSKIY, L.V.; SAL'KOVA, Ye.G.; MUKHIN, Ye.N.; KORABLEVA, N.P.; MOROZOVA, N.P.

Using ionizing radiations to control the dormancy of potatoes during storage. Report No.2. Biokhim.pl.i ovoshch. no.6:5-57 '61. (MIRA 14:6)

1. Institut biokhimii imeni A.N.Bakha AN SSSR.
(Plants, Effect of gamma rays on) (Potatoes--Storage)

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001446910002-4"

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S/020/61/137/004/031/031
B103/B208

AUTHORS: Mukhin, Ye.N. and Sal'kova, Ye.G.

TITLE: Biosynthesis of chlorophyll in the reserve organs of plants in connection with the effect of ionizing radiation

PERIODICAL: Doklady Akademii nauk SSSR, v. 137, no. 4, 1961, 976 - 979

TEXT: The authors studied the accumulation of chlorophyll in connection with the effect of γ-radiation on tubers of the potato sorts a) "Lorch", b) "Priyekul'skiy", and c) "Epron". The suppression of chlorophyll formation in the potato plant by γ-radiation is known. The tubers were irradiated with a dose of 450 r/min (Co^{60}) in an ЭГО-2 (EGO-2) apparatus. Pigments and ferment activity were determined in the outer layer after removing the peel. The authors observed the wellknown greening of the control tubers in the peripheral layer of the parenchyma of the skin on exposure to light as a result of chlorophyll accumulation. The action of γ-radiation (dosis 10 000 r) suppressed the greening substantially, to a different extent in the individual sorts: a) the synthesis of green pigments (especially of a-chlorophyll) was only reduced; b) and c): the

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other two sorts neither formed the a- nor the b-chlorophyll. The effect of γ-radiation on redox ferments (Fe derivatives of porphyrin) was also studied. During the first stages of their synthesis, they undergo the same phases as the Mg derivatives of porphyrin to which also chlorophyll belongs. The data refer to the sort "Lorch". The authors made the following observations: Polyphenol oxidase (a Cu-containing ferment) which is very active in potato tissues, and catalase changed neither on exposure to light nor on γ-irradiation. γ-irradiation and exposure to light increased the activity of peroxidase and cytochrome oxidase. The activity of peroxidase was far more increased in control tubers than in irradiated samples. The activity of glycolic acid oxidase continuously increases after exposure to light. This process also takes place in hardly greened tubers (irradiated with 150 000 r). This indicates that this ferment may be activated on exposure to light of the plants, irrespective of the presence of chlorophyll. γ-radiation and visible light exert different effects on the ferments of the dehydrase complex. These ferments are usually activated by irradiation, whereas exposure to light gradually reduces their activity. The latter effect is possibly due to the accumulation of dehydrase inhibi-

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B103/B208

Biosynthesis of chlorophyll ...

tors on exposure to light. On the other hand, the level of the activity of dehydrase in irradiated tubers remains the same on exposure to light, i.e., it is higher than in the control. The latter results also apply to sorts b) and c). The activity of redox ferments was not decreased by γ-radiation. A similar response to the effect of light was therefore expected for oxidative ferments in controls and irradiated tubers. This was confirmed by the above results. The authors assume that γ-radiation disturbs the energy balance in the tissue by disconnecting the oxidation processes and phosphorylation. This was also confirmed by a special experiment on the effect of γ-radiation upon the activity of hexokinase in the tubers, which was reduced. This indicates that the initial phosphorylation of carbohydrates is suppressed by γ-radiation. The activity of hexokinase was determined according to A.V. Kotel'nikova (Ref. 10, Biokhimiya, 17, no. 4, 1952). The authors believe that these results indicate the great importance of oxidation and phosphorylation being tuned to each other for the biosynthesis of chlorophyll. There are 2 figures, 3 tables and 10 references: 6 Soviet-bloc and 4 non-Soviet-bloc. The reference to the English language publication reads as follows: Ref. 8,

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S/020/61/137/004/031/031
B103/B208

Biosynthesis of chlorophyll

S. Schwimmer, W. Weston. Am. Potato J., 34, no. 2, 31, 1957. ibid., 36, no. 6, 334 (1958).

ASSOCIATION: Institut biokhimii im. A.N. Bakha Akademii nauk SSSR (Institute of Biochemistry imeni A.N. Bakh of the Academy of Sciences USSR)

PRESENTED: November 22, 1960 by A.I. Oparin, Academician

SUBMITTED: November 18, 1960

Card 4/4

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"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001446910002-4

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5.4600

S/020/61/141/002/027/027
B101/B110

AUTHORS: Metlitskiy, L. V., and Sal'kova, Ye. G.

TITLE: Disturbance of energy interchange in plants under the influence of gamma radiation

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 141, no. 2, 1961, 485-487

TEXT: A previous work (Biokhimiya plodov i ovoshchey, v. 5 (1959)) showed that the activity of oxidases is not substantially changed by radiation; the activity of the hexokinase, however, decreases by more than 50-60%. The object of the present work consisted in a more exact examination of the disconnection between breathing and oxidative phosphorylation caused by radiation. The subject of examination were garlic bulbs of the Gribovskiy kind. Radiation took place in an ЕГО-20 (EGO-20) apparatus. The intensity of the source was 1500 r/min, the dose 10,000 and 500,000 r. After irradiation the storing tissue and the meristematic tissue were homogenized in a phosphate buffer (pH=7.2, dilution 1:5). The reaction mixture comprising homogenizate, boiled yeast juice, adenosine triphosphate, glucose, and NaF was filled into a Warburg vessel, heated at 30°C in a

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Disturbance of energy interchange in ... S/020/61/141/002/027/027
B101/B110

thermostat for 20 minutes, whereupon the sodium salt was added to the acid (succinic, malic, citric acids) to be examined with respect to oxidation. Results are shown in Table 1. Phosphorylation data are shown in Table 2. A comparison of the data on oxidation and phosphorylation shows that the latter was much more suppressed. Consequently, disconnection between oxidation and phosphorylation in the plant tissue occurred as a result of irradiation. The plant cell is not able any more to utilize the energy released by breathing for the synthesis of important substances. There are 1 figure, 2 tables, and 5 references: 4 Soviet and 1 non-Soviet.

ASSOCIATION: Institut biokhimii im. A. N. Bakha Akademii nauk SSSR (Institute of Biochemistry imeni A. N. Bakh of the Academy of Sciences USSR)

PRESENTED: June 24, 1961, by A. I. Oparin, Academician

SUBMITTED: June 15, 1961

Card 2/2

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001446910002-4"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001446910002-4

METLITSKIY, L.V.; SAL'KOVA, Ye.G.; MUKHIN, Ye.N.; KORABLEVA, N.P.; MOROZOVA, N.P.

Use of ionizing radiation for controlling the dormancy of potatoes in storage. Report No. 3. Biokhim.pl.i ovoshch. no.7:5-50 '62. (MIRA 16:1)

1. Institut biokhimii imeni A.N.Bakha AN SSSR.
(Potatoes—Storage) (Gamma rays—Physiological effect)
(Dormancy in plants)

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001446910002-4"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001446910002-4

SAL'KOVA, Ye.G.

Effect of gamma-irradiation on the change of carbohydrate composition in the storage organs of plants. Dokl. AN SSSR 149 no.5:1203-1205 Ap '63. (MIRA 16:5)

1. Institut biokhimii im. A.N.Bakha AN SSSR. Predstavlono akademikom A.I.Oparinym.
(PLANTS, EFFECT OF GAMMA RAYS ON) (CARBOHYDRATE METABOLISM)

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001446910002-4"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001446910002-4

MUKHIN, Ye.N.; SAL'KOVA, Ye.G.

Effect of γ-radiation on the resistance of potato tubers to phytopathogenic micro-organisms. Izv. AN SSSR Ser. biol. 29 no.1:137-142 Ja-F'64 (MIRA 17:3)

1. Institute of Biochemistry, Academy of Sciences of the U.S.S.R, Moscow.

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001446910002-4"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001446910002-4

SAL'KOVA, Ye.G.; NGO KE SYONG

Pectolytic enzymes of fungi responsible for fruit rot. Dokl. AN SSSR 161 no.1:241-243 Mr '65. (MIRA 18:3)

1. Institut biokhimii im. A.N. Bakha AN SSSR. Submitted June 9, 1964.

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001446910002-4"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001446910002-4

SAL'KOVA, Ye.G.; GUSEVA, N.N.

Role of pectolytic enzymes of Verticillium dahliae in the development of cotton wilt. Dokl. AN SSSR 163 no.2:515-518 Jl '65. (MIRA 18:7)

1. Institut biokhimii im. A.N.Bakha AN SSSR i Vsesoyuznyy institut zashchity rasteniy. Submitted November 18, 1964.

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001446910002-4"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001446910002-4

SAL'KOVA, Ye.O.; BEKBULATOVA, R.T.

Phenol substances in healthy and rotten apples. Prikl. biokhim. i mikrobiol. 1 no.4:466-468 Jl-Ag '65. (MIRA 18:11)

1. Institut biokhimii imeni A.N.Bakha AN SSSR.

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"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001446910002-4

ODINTSOVA, M.S. Prinimali uchastiye: MILKOVA, M.G.; KOSAREVA, Ye.A. BASS, I.A. [translator]; BEKINA, R.M. [translator]; GVOZDEV, V.A. [translator]; GEORGIYEV, G.P. [translator]; GUMILEVSKAYA, N.A. [translator]; KUVAYEVA, Ye.B. [translator]; MIL'MAN, L.S. [translator]; MIKHAYLOVA, Ye.S. [translator]; MOSOLOVA, I.M. [translator]; PINUS, Ye.A. [translator]; SAL'KOVA, Ye.P. [translator]; SAMARINA, O.P. [translator]; CHENTSOV, Yu.S. [translator]; VETROVA, I.B., red.izd-va; DOROKHINA, I.N., tekhn.red.

[Functional biochemistry of cell structures; symposium 2] Funktsional'naia biokhimiia kletochnykh struktur; simpozium II. 1962. 314 p. (MIRA 16:1)

1. International Congress of Biochemistry. 5th, Moscow, 1961. (BIOCHEMISTRY--CONGRESSES)

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001446910002-4"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001446910002-4

ACC NR: AP6035737 SOURCE CODE: UR/0413/66/000/019/0101/0101

INVENTORS: Chernyak, R. Ya.; Kirilyuk, N. I.; Pushenko, A. I.; Oreshkin, Ye. S.; Strel'chenko, A. M.; Sal'kov, Yu. G.

ORG: none

TITLE: An information storage using magnetic cards. Class 42, No. 186762 [announced by Institute of Cybernetics, AN UkrSSR (Institut kibernetiki AN USSR)]

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 19, 1966, 101

TOPIC TAGS: information storage and retrieval, magnetic recording, storage device

ABSTRACT: This Author Certificate presents an information storage using magnetic cards. The storage unit includes an input keyboard, a vacuum drum for transferring the cards, and a buffer storage device (see Fig. 1). The design increases the

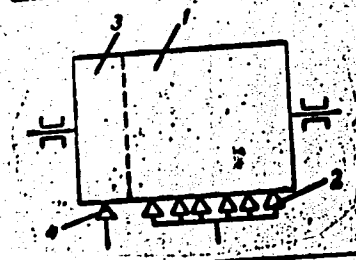

Fig. 1. 1 - vacuum drum; 2 - magnetic heads for recording the readout from the magnetic cards; 3 - surface of the vacuum drum, free from magnetic cards; 4 - magnetic heads of the buffer storage device

UDC: 681.142.07

Card 1/2

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"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001446910002-4

ACC NR: AP6035737

reliability and reduces the equipment requirement. The buffer storage device is made on the part of the vacuum drum surface free from magnetic cards. This part of the surface is coated with a nickel-cobalt film. Orig. art. has: 1 figure.

SUB CODE: 09/ SUBM DATE: 07Oct65

Card 2/2

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"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001446910002-4

Salkovits, E.

Distr: 4E3d

A new photoelectric measuring arrangement to study the fluorescence polarization. I. Ketskeméty, L. Garzó, and E. Salkovits (Univ. Szeged, Hung.). *Acta Univ. Szegediensis, Acta Phys. et Chem.* [N.S.] 3, 16-20(1957)(in German).—The measurement of the degree of polarization includes the use of 2 secondary electron multipliers, which eliminates the need for depolarizing glass plates, in such an arrangement that not only the transverse, but also the longitudinal measurements are made possible (the excited light rays and those that become fluorescent light rays in the secondary electron multipliers are not perpendicular), which permits the proportionally simple elimination by calcn. of the depolarizing effect of the secondary fluorescence. The av. relative error $(\Delta p)/p$ even at a layer thickness of 0.001 cm. is less than 1%. M. C. Newmann

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"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001446910002-4

SALKOVITS, E.

HUNGARY/Optics - Luminescence K-6

Abs Jour : Ref Zhur - Fizika, No 4, 1959, No 6750

Author : Budo A., Ketskemety I., Salkovits E., Gargya L.
Inst : The University, Szeged, Hungary
Title : Determination of the Actual Degree of Polarization of Light of Fluorescence of Solutions

Orig Pub : Acta phys. Acad. sci. hung., 1957, 8, No 1-2, 181-193

Abstract : A theoretical investigation was made of the depolarizing action of secondary fluorescence in solutions. An analytical relationship has been derived between the measured and actual degrees of polarization of isotropic, optically-inactive solutions. This relationship makes it possible to determine moreaccurately the actural degree of polarization. An experimental verification of the derived relations was made with solutions of fluorescein to which glycerine has been added. This verification has shown a satisfactory correspondence between the observed quantities and those calculated. -- G.G. Neuymin

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"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001446910002-4

SAL'KOVSKAYA, Ye. S.

"The Transfusion of the Erythrocyte Mass, According to Data of the Therapeutic Clinic of the Institute imeni Sklifosovskiy from 1944 to 1947," Terap. Arkhiv, 20, No. 2, 1948. Mbr., Therapeutic Clinic, Moscow City Sci. Res. Inst. First Aid im. N. V. Sklifosovskiy, -c1948-.

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001446910002-4"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001446910002-4

USSR/Medicine - Blood Transfusion May/Jun 51

"Reactions On Transfusion of Erythrocytic Mass," A. I. Kizilova, Cand Med Sci, Ye. S. Sal'kovskaya, Therapeutic Dept, Inst imeni Sklifosovskiy

"Terap Arkhiv" Vol XXIII, No 3, pp 80-85

The reactions are weaker than with whole blood, because the plasma content is lower. Fever often occurs: This may be due to the presence of bacterial proteins in the blood used. There may be a delayed hemolytic reaction, possibly caused by incompatibility due to Rh factor. However, many

192T84

USSR/Medicine - Blood Transfusion May/Jun 51
(Contd)

USSR investigators consider that the significance of the Rh factor is overestimated by American workers. In a number of diseases (leukemia, endocarditis, nephritis, cirrhosis of the liver) erythrocytic mass is preferable to whole blood, because the reactions are weaker.

192T84

SAL'KOVSKAYA, Ye. S.

PA 192T84

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"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001446910002-4

SAL'KOVSKIY, O.

Austria - Social Conditions

"Austrian Laboring classes are suffering hunger and proverty," Prof. soiuzy, No. e, 1952.

Monthly List of Russian Accessions, Library of Congress, May 1952, Unclassified.

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001446910002-4"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001446910002-4

1. SAL'KOVSKIY, O.

2. USSR (600)

4. Salzburg, Austria - Description

7. Salzburg. Vokrug sveta No. 4, 1953.

9. Monthly List of Russian Accessions, Library of Congress, April 1953, Uncl.

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001446910002-4"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001446910002-4

SAL'KOVSKIY, O.

Green Styria. Vokrug sveta no.11:23-27 N '54. (MLRA 7:11)
(Styria--Description and travel)

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001446910002-4"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001446910002-4

SAL'NOVSKIY, O. V.

SAL'NOVSKIY, O. V.- "Austria (Economic-Geographic Characteristics)." Acad Sci USSR. Inst of Geography. Moscow, 1955. (Dissertation for the Degree of Candidate of Geographical Sciences)

So; Knizhnaya Letopis', No 3, 1956

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001446910002-4"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001446910002-4

SAL'KOVSKIY, Oleg Vladimirovich; SPERANSKAYA, L., red.; SMIRNOV, G., tekhn.red.

[Economic position of the laboring class in Austria after the Second World War] Ekonomicheskoe polozhenie rabochego klassa Avstrii posle Vtoroi Mirovoi voiny. Moskva, Izd-vo sotsial'no-ekon.lit-ry, 1958. 111 p. (MIRA 12:5)

(Austria--Labor and laboring classes)

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001446910002-4"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001446910002-4

SAL'KOVSKIY, Oleg Vladimirovich; ZABIROV, B.Sh., red.; POPOVA, V.I., mladshiy red.; KISELEVA, Z.A., red.kart; GLEYKH, D.A., tekhn.red.

[Austria; characteristics of its economic geography] Avstriia; ekonomiko-geograficheskaia kharakteristika. Moskva, Gos.izd-vo geogr.lit-ry, 1959. 206 p. (MIRA 13:7)
(Austria--Economic conditions)

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001446910002-4"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001446910002-4

LYUBIMOVA, V.V., doktor ekon. nauk; NOVIKOVA, O.G., kand. ekon. nauk; SERGEYEVA, A.G., kand. ekon. nauk; IVANOV, N.P., kand. istor. nauk; OBORINA, G.A., kand. ekon. nauk; KHLYNOV, V.N., kand. ekon. nauk; DANILEVICH, M.V., doktor ekon. nauk; POKATAYEVA, T.S., kand. ekon. nauk; USOV, G.A., kand. ist. nauk; SAL'KOVSKIY, O.V., kand. geogr. nauk. Prinimali uchastiye: PESCHANSKIY, V V., kand. ist. nauk; PIROGOVA, I.M.; PRONIN, S.V.; USVYATSOV, A.Ye.; MAKAROV, V., red.; DARONYAN, M., mladshiy red.; ULANOVA, L., tekhn. red.

[Real wages during the period of the general crisis of capitalism]Real'naia zarabotnaia plata v period obshchego krizisa kapitalizma. Moskva, Sotsekgiz, 1962. 558 p. (MIRA 16:3)

1. Akademiya nauk SSSR. Institut mirovoy ekonomiki i mezhdunarodnykh otnosheniy.
(Wages)

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001446910002-4"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001446910002-4

SALL', A.O.

Shortcomings of the absorption gas analyzer and the determination of the optimum length of the absorption chamber. Priborostroenie no.6:14-18 Je '56. (MLRA 9:8)

(Gases--Analysis)

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001446910002-4"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001446910002-4

Sall, A.O.

Selectivity and sensitivity of infrared gas analyzers. A. O. Sall. *Priborostroenie* 1956, No. 9, 12-15.—The sensitivity is $\Delta c/c_1 \approx a\, k_1(\nu_0)/k\,(\nu_0)$ where Δc is the change in concen. of the component to be detd. and c_1 the concen. of un- [illegible] with similar spectral lines [illegible] where a [illegible] the min. signal [illegible] in the ideal case [illegible] nselective [illegible] chambers filled with the disturbing [illegible] component are used. Several methods use of mono- [illegible] matic radiation, selective modulation of a nonselective receiver, etc.) can improve the selectivity. The optical acoustical method proposed by Velugerov (*C.A.* 33, 666; 42, 1467c) has the same sensitivity as mass spectrometers (in this case $b \approx 3$ or 4 as compared to 10^3-10^4 of nonselective receivers); the selectivity is better in certain cases than that of a mass spectrometer (analysis of CO and a mixt. of N_2, CO_2, and O_2). S. Pakswer

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"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001446910002-4

SALL', A.O.

On the theory of the microphone chamber of Veingerov's spectrophone and of the optico-acoustical gas analyser. Zhur.tekh.fiz.26 no.1: 157-174 Ja '56. (MLRA 9:6)
(Infrared rays) (Gases--Analysis)

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001446910002-4"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001446910002-4

SOV/51-5-3-16/21

AUTHOR: Sall', A.O.

TITLE: On the Optimum Optical Density in Absorption Analysis of Gas or Liquid Mixtures (Ob optimal'noy opticheskoy plotnosti pri absorbtsionnom analize smesey gazov ili zhidkostey)

PERIODICAL: Optika i Spektroskopiya, 1958, Vol 5, Nr 3, pp 316-321 (USSR)

ABSTRACT: Thickness of a layer of a gas or liquid mixture employed in absorption analysis, which is based on measurement of absorption by one component of the mixture, should be such that the errors made in the analysis become as small as possible (Refs 1-5). Assuming that absorption follows an exponential law the author obtained approximate formulae for determination of the optimum value of the optical density of the analysed mixture. Several methods of absorption analysis are discussed in detail. They are: (1) Double-beam differential absorptiometer; (2) A compensation method in which the chamber containing the gas mixture of known composition (used for calibration) has a variable optical path (Fig a); (3) A method in which the calibration chamber is filled with a gas

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to which the component in question is added in controlled amount (Fig b); (4) A method which employs only one chamber through which the analysed gas flows and which has a vibrating mirror for reflection of the incident radiation (Fig v). Formulae valid for any spectral region are given for each of the methods discussed. The optimum value of the optical density is found to depend on the physical parameters and the construction of the absorptiometer used and on the method of measurement employed. There are 1 figure and 5 Soviet references.

ASSOCIATION: Gosudarstvennoye soyuznoye konstruktorskoye byuro analiticheskogo priborostroyeniya (All-Union State Design Bureau for Analytic Instruments)

SUBMITTED: September 6, 1957

Card 2/2

1. Gas mixtures--Optical properties 2. Solutions--Optical properties 3. Gases--Absorption 4. Solutions--Absorption

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"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001446910002-4

SOV/46-5-3-12/32

24(1)

AUTHOR: Sall', A.O.

TITLE: On the Fluctuation Threshold of Microphone Sensitivity (O flyuktuatsionnom poroge chuvstvitel'nosti mikrofona)

PERIODICAL: Akusticheskiy zhurnal, 1959, Vol 5, Nr 3, pp 351-354 (USSR)

ABSTRACT: The author calculates sensitivity threshold of a microphone imposed by thermodynamic fluctuations of its moving system and temperature fluctuations in the volume enclosed by it. Two formulae are given for the sensitivity threshold Δp: when $\omega C \ll G$ (G is the thermal conductivity and C is the effective specific heat capacity of the gas enclosed by the microphone, ω is angular frequency) we have

$$\Delta p \simeq \sqrt{4kTPC_V(\gamma - 1)\Delta f G^{-1}},$$

and when $\omega C \gg G$ we have

$$\Delta p \simeq \sqrt{4kT\Delta f PG(\gamma - 1)\omega^{-2}C_V^{-1}V^{-1}}.$$

Here k is the Boltzmann constant, T is the absolute temperature, P is the gas pressure in the microphone, C_V is the specific heat of the enclosed gas at constant volume, $\gamma = 1.4$, Δf is the transmission band of the recording apparatus and V is the volume of gas enclosed. The author

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SOV/46-5-3-12/32

On the Fluctuation Threshold of Microphone Sensitivity

considers a numerical example with $G \simeq 4 \times 10^{-2}$ cal $sec^{-1} deg^{-1}$, $V = 5$ cm^3, $T = 300°K$, $P = 1$ atm, $\Delta f = 1$ c/s. In the low-frequency case when $\omega C \ll G$ the author found $\Delta p \simeq 2 \times 10^{-5}$ bar and in the high-frequency case, when $\omega C \gg G$, $\Delta p \simeq 3 \times 10^{-7}$ bar. These results show that, at sufficiently low frequency, the noise due to thermodynamic fluctuations of the moving system and temperature fluctuations in the enclosed gas may be higher than the noise due to fluctuations in the number of collisions of air molecules with the microphone membrane. There are 8 references, 6 of which are Soviet and 2 English.

ASSOCIATION: Gos. soyuznoye konstruktorskoye byuro analiticheskogo priborostroyeniya, (State Union Design Bureau for Analytic Instrument Construction)

SUBMITTED: April 15, 1958

Card 2/2

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001446910002-4"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001446910002-4

SOV/51-6-2-14/39

AUTHOR: Sall', A.O.

TITLE: On the Threshold of Sensitivity of an Optico-Acoustic Receiver of Radiation. (O poroge chuvstvitel'nosti optiko-akusticheskogo priyemnika radiatsii). I. Low Obturation Frequency. (Nizkaya chastota obtyuratsii)

PERIODICAL: Optika i Spektroskopiya, 1959, Vol 6, Nr 2, pp 219-225 (USSR)

ABSTRACT: A selective optico-acoustic receiver (M.L. Veyngerov's spectrophone, Refs 1-10) works by excitation of acoustic vibrations in a closed vessel. Such a vessel is filled with gas and the vibrations are excited by absorption of light from a light beam which is interrupted by means of a rotating disk with apertures. Sensitivity of an optico-acoustic receiver is limited by thermal fluctuation noises in the gas, by electrical fluctuations in the microphone used to detect acoustic vibrations and in the input cascade of an amplifier as well as by external vibrations. Results of a theoretical investigation of the

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"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001446910002-4

SOV/51-6-2-14/39

On the Threshold of Sensitivity of an Optico-Acoustic Receiver of Radiation.
I. Low Obturation Frequency.

threshold sensitivity of optico-acoustic receivers and non-selective receivers using an absorbing film are given in the present paper. Formulae are obtained for determination of the numerical value of the sensitivity threshold which are valid at low frequencies of interruption of the light beam. The paper is entirely theoretical. There are 13 references, 11 of which are Soviet, 1 English and 1 German.

SUBMITTED: September 6, 1957

Card 2/2

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001446910002-4"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001446910002-4

SOV/51-6-3-18/28

AUTHOR: Sall', A.O.

TITLE: On the Sensitivity Threshold of an Infrared Absorption Gas Analyser with Gas Modulation (O poroge chuvstvitel'nosti infrakrasnogo absorbtsionnogo gazoanalizatora s gazovoy modulyatsiyey)

PERIODICAL: Optika i Spektroskopiya, 1959, Vol 6, Nr 3, pp 394-397, (USSR)

ABSTRACT: The paper deals with infrared absorption gas analysers which use optico-acoustic receivers. Sensitivity of two-beam analysers is limited by random variations in the beams; these variations affect the zero point of the analyser. The author describes a new one-beam analyser with gas modulation. In this analyser the number of molecules of the component to be determined is varied periodically in the working chamber, leaving the amounts of the other components unchanged. Such a variation may be achieved, say, by chemical absorption. The analyser is shown schematically in a figure on p 395. In that figure 1 denotes a light source, 2 - a working chamber, 3 - a receiver, 4 - a recording device, 5 - a chamber in

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which the component to be determined is removed, 6 - a bellows, 7 and 8 - valves and 9 - a constant source of the gas to be analysed. In one half-period the bellows (6) expands, the valve (7) is opened and the valve (8) is closed, the gas mixture is drawn into 6 via the working chamber (2) and the chamber (5) (where the component of interest is removed). In the next half-period 7 is closed, 8 is opened and 6 contracts, expelling the gas mixture, minus the component to be determined, into the working chamber (2). The threshold sensitivity Δc of the analyser with a selective optico-acoustic receiver is given by

$$\Delta c = A/\varepsilon L\sqrt{t} \qquad (4)$$

where L is the length of the working chamber in mm, t is the time constant of the receiver, $\varepsilon = 1$ and $A = 10^{-4}$. For $L = 100$ mm, $t = 60$ sec, $\Delta c \sim 10^{-6}\%$. The threshold sensitivity of this analyser coupled with a non-selective optico-acoustic receiver is also discussed. It is found to

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SOV/51-6-3-18/28

On the Sensitivity Threshold of an Infrared Absorption Gas Analyser with Gas Modulation

be slightly higher than that of the analyser with a selective receiver. The paper is entirely theoretical. There is 1 figure and 9 references, of which 8 are Soviet and 1 German.

SUBMITTED: May 9, 1958

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"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001446910002-4

24(4), 5(2), 5(3) SOV/51-6-4-24/29

AUTHOR: Sall', A.O.

TITLE: On the Sensitivity Threshold of an Optico-Acoustic Receiver of Radiation. (O poroge chuvstvitel'nosti optiko-akusticheskogo priyemnika radiatsii). II. A Non-Uniform Liberation (Distribution) of Heat in the Volume of the Selective Receiver Chamber. High Frequency of Obturation. (II. Neravnomernoye vydeleniye tepla po ob"yemu kamery selektivnogo priyemnika. Vysokaya chastota obtyuratsii)

PERIODICAL: Optika i Spektroskopiya, 1959, Vol 6, Nr 4, pp 556-561 (USSR)

ABSTRACT: The author considers the case of a non-uniform distribution of heat in the chamber of a selective optico-acoustic receiver. Formulae obtained for numerical values of the sensitivity thresholds of selective and non-selective receivers, which are valid at high frequencies of obturation (modulation). Formulae are also obtained for the optimum length of the cylinder of a selective receiver and for the optimum concentration of the absorbing gas. The paper is entirely theoretical. There are 5 references, 4 of which are Soviet and 1 English.

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"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001446910002-4

SOV/51-7-2-20/34

AUTHORS: Sall', A.O. and Stanevich, S.B.

TITLE: Use of the Selective Emission of a Gas in Infrared Gas Analysers (Ispol'zovaniye izbiratel'nogo izlucheniya gaza v infrakrasnykh gazoanalizatorakh)

PERIODICAL: Optika i spektroskopiya, 1959, Vol 7, Nr 2, pp 256-258 (USSR)

ABSTRACT: Radiation source in infrared gas analysers is usually a chrome-nickel spiral heated to 700-800°C. Selectivity of such gas analysers is ensured by the use of selective optico-acoustic receivers (Ref 1). The present note describes how selective emission of a hot gas may be used instead of a source with a continuous spectrum; the use of a selective source leads to an improved analyser selectivity. Fig 1a shows schematically an optico-acoustic gas analyser with selective radiation sources in the form of heated cylindrical chambers (1) filled with the gas (e.g. CO_2) whose concentration is to be determined in a given mixture. The inner surfaces of both these chambers are chrome plated and polished. The radiation beams are interrupted at the same rate and phase by a perforated disk (2) at 6 c/s. The right-hand beam passes through the analysed mixture in a working chamber (3); the left-hand beam

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passes through a comparison chamber (4). Receiver cylinders (5) are filled with the gas whose concentration in the working chamber is to be determined (CO_2 again). The difference between the pressures produced by the two radiation beams in the receiver cylinders is transformed by a condenser microphone (6) into an alternating voltage which is amplified (7) and recorded (8). The precision of this gas analyser depends primarily on the ratio F of the signal which is produced on introduction of CO_2 into the working chamber to the signal produced by an uninterrupted radiation beam. Fig 2 shows the curves of the dependence of this ratio F on the CO_2 concentration C in the mixture to be analysed. The curves were obtained on filling a selective receiver with CO_2 (curve a) and with a mixture of 8.4% CO_2 and nitrogen (curve б). The gas in the selective sources was heated to 86°C and the ambient temperature was 20°C. Fig 1б shows a single-beam variant of the gas analyser just described. In this case a filter chamber (4) is used in order to absorb radiation of the gas-mixture components which are not analysed; other parts are analogues of those shown in Fig 1a.

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Fig 1б shows an arrangement used to minimize the error due to radiation from the walls and windows of the working chamber. Two hot selective sources are used here: one of them is a working chamber (2) and the other a comparison chamber, filled with N_2 (1). A filter chamber, as in Fig 1б, is employed and other components are similar to those shown in Fig 1a. There are 2 figures and 2 Soviet references.

SUBMITTED: January 24, 1959

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APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001446910002-4"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001446910002-4

AUTHOR: Sall', A.O. SOV/51-7-3-21/21

TITLE: On the Sensitivity Threshold of an Optico-Acoustic Radiation Receiver. III. The General Case of a Non-Cylindrical Selective Receiver Chamber. Examples of Calculations.

PERIODICAL: Optika i spektroskopiya, 1959, Vol 7, Nr 3, pp 432-436 (USSR)

ABSTRACT: The author deduces formulae for determination of the numerical value of the sensitivity threshold of a selective optico-acoustic receiver of radiation whose receiver chamber is of complex form. The following receiver-chamber shapes are considered: cylindrical (Fig 1a), hemispherical (Fig 1б), truncated 90° cone (Fig 1в) and a circular groove of triangular cross-section (Fig 1г). Examples of calculation of the receiver-chamber depth are given. The paper is entirely theoretical. There are 2 figures and 5 Soviet references.

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"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001446910002-4

SOV/51-7-4-29/32

AUTHOR: Sall', A.O.

TITLE: Selective Modulation of Radiation by Periodic Variation of Gas Temperature

PERIODICAL: Optika i spektroskopiya, 1959, Vol 7, Nr 4, p 576, (USSR)

ABSTRACT: Selective sources used in optico-acoustic gas analysers consist of chambers filled with an appropriate gas. Selectivity of such sources is reduced by emission of the window and walls of the chamber. To avoid the effect of this emission the gas temperature should be varied periodically (for example by alternating compression and rarefaction of the gas) without altering to any great extent the temperature of the window and the walls of the chamber. Using only the modulated radiation beam, the effect of the window and the walls is very considerably reduced. These ideas were checked experimentally using carbon dioxide. The gas temperature was modulated either by periodic compression of the chamber (the latter being in the form of a bellows) or by filling the chamber with hot and cold gas alternately (two variants of the second method are shown in Figs 1 and 2). There are 2 figures.

SUBMITTED: January 24, 1959

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"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001446910002-4

24 (8)

AUTHOR: Sall', A. O., Engineer SOV/119-59-8-6/15

TITLE: On the Thermal Calculation of Some Junction Points of Instruments

PERIODICAL: Priborostroyeniye, 1959, Nr 8, pp.19-20 (USSR)

ABSTRACT: In the case of some instruments the temperature of certain junction points, which are heated by internal heat sources, must be taken into account. It was pointed out that in publications calculation of the temperature drop between heated and cooled surfaces of simple bodies was deduced, but that for more complicated bodies, this calculation has hitherto not been investigated. This is approximately done in the present paper, and feelers of the bolometer-type are first investigated. For this purpose the heat conductivity equation (1) for steady processes is used as a basis, and formulas (4) and (5) are derived for the temperature difference and the heat transfer for the surfaces of two concentric spheres with the radii R and r ($R > r$). For the case in which the heat-conductive surfaces touch, formula (6) is given for heat transfer. Calculation of this integral is, however, described as not easy, and it is recommended further for the case in which the distance between the shells of the two spheres show not too great differences at various points, formulas (4) - (5) be used. As

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On the Thermal Calculation of Some Junction Points of Instruments SOV/119-59-8-6/15

formulas (4) and (5) are rigorously deduced for concentric spheres, an application in the above recommended sense always involves an error, and the error occurring in the application of formulas (4) and (5) for coaxial cylindrical surfaces is calculated. The thermal conductivity of thermal resistors in a gas medium is finally dealt with, and for the thermal conductivity formula (8) is given. Application in gas analysts and pressure gauges is briefly discussed. As an example the heat transfer of a thermal resistor in a cylindrical chamber is determined. There are 6 Soviet references.

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SOV/51-8-1-35/40

AUTHOR: Sall', A.O.

TITLE: On the Ratio of the Signal of the Component Being Investigated to the Signal of the Total Radiation Flux in Infrared Gas Analysers

PERIODICAL: Optika i spektroskopiya, 1960, Vol 8, Nr 1, pp 135-137 (USSR)

ABSTRACT: The author discusses sensitivity and accuracy of infrared analysers. He suggests that the sensitivity of these analysers can be increased by the use of optico-acoustic receivers or by employing periodical variation of the amount of the gas component to be determined in the path of the two radiation beams in the analyser. Such variation may be produced by the use of modulating chambers with mobile reflecting walls (Refs 9, 10). Vibrations of the elastic reflecting walls are excited by means of an electromagnet fed from an a.c. source. It was found that, for the best results, the electromagnet should be supplied with unidirectional alternating current (from a half-period rectifier) or current consisting of periodically repeated pulses (preferably square ones). This procedure improves the selectivity of the analyser, since, from the modulated radiation, we can select the wavelengths which are of interest to us. The sensitivity of gas analysers employing the modulation technique just described is still lower than that of optico-acoustic analysers. The sensitivity of an analyser with a non-selective

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68891

S/051/60/008/02/018/036
E201/E391

5.5800

AUTHOR: Sall', A.O.

TITLE: Gas Characteristics of an Optico-acoustic Gas Analyser

PERIODICAL: Optika i spektroskopiya, 1960, Vol 8, Nr 2, pp 247 - 252 (USSR)

ABSTRACT: The precision of an absorption gas analyser can be given in the form of the ratio of the signal when the amount of the component to be analysed is altered in the gas mixture to the signal due to the total radiation flux. The present paper deals with determination of this ratio (denoted by F) using gas characteristics of the analyser. These characteristics are obtained as follows. A working chamber is placed between a source and a receiver (in the case of double-beam analysers the comparison beam is shut off). The working chamber is filled in turn with gas mixtures containing various amounts of the component whose concentration is sought. Then a curve is constructed which shows dependence of the signal at the receiver output on the product of the length of the working chamber and the concentration of the component which is measured (present

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Gas Characteristics of an Optico-acoustic Gas Analyser

in the chamber). Figures 1 and 2 show such curves for optico-acoustic gas analysers when the latter are used to find concentrations of carbon dioxide and methane. Here u is the product of the concentration of CO_2 or CH_4 and the length of the working chamber; w is the product of the concentration of CO_2 or CH_4 in the receiver and the path of rays in it. The ordinates represent the signal in relative units. The gas characteristics in Figures 1 and 2 were obtained with an analyser developed at the GSKB of Analytic Instrument Construction (Ref 2). The curves of Figures 1 and 2 represent dependences of (1 - F) on values of u, obtained at various values of w. Using these curves we can find the dependences F = F(u, w). The latter are shown graphically in the form of straight lines F = F(u, w) = const in Figures 3 (CO_2) and 4 (CH_4). The shaded regions in Figures 3 and 4 represent the working ranges of optico-acoustic gas analysers with electrical compensation

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Gas Characteristics of an Optico-acoustic Gas Analyser

developed at the GSKB of Analytic Instrument Construction. The author discusses also the sensitivity of gas analysers. For a particular gas the sensitivity is given by the product $L(\Delta c)/\alpha$, where L is the ray path length in the working chamber, α represents the relative magnitude of secular fluctuations of the total radiation flux and Δc is the threshold sensitivity expressed as the smallest change of concentration detectable with the analyser. This product is numerically equal to the absolute value of the cotangent of the slope of the gas characteristic. For the methane analyser discussed above (Figure 2) the minimum value of the product $L(\Delta c)/\alpha$ is approximately 100 mm.%, i.e. if $\alpha = 10^{-5}$ and $L = 100$ mm, then the threshold sensitivity is $\Delta c = 0.001\%$.
There are 4 figures and 3 Soviet references.

SUBMITTED: May 29, 1959

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S/051/60/008/005/023/027
E201/E491

24.3100

AUTHOR: Sall', A.O.

TITLE: Design of a Chamber for a Baro-Optical Source of Radiation

PERIODICAL: Optika i spektroskopiya, 1960, Vol.8, No.5, pp.731-733

TEXT: The author described earlier (Ref.1) a selective source of modulated radiation which uses emission by a gas whose temperature is varied periodically by alternating compression and expansion. The present paper derives a design formula for calculation of the depth of a chamber for such a radiation source. The optimum depth for a cylindrical chamber is given by

$$\ell_0 \simeq 1.2\, r \left[1 + \left(\frac{\pi c_v r^2 f}{4\lambda} \right)^2 \right]^{-0.25} \qquad (8)$$

where r is the radius of the chamber window, c_v is the specific heat of the gas per unit volume, f is the modulation frequency and λ is the thermal conductivity of the gas. The above formula is valid when the mean amplitude of temperature oscillations ϑ is proportional to heat exchange; it is also

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SALL', A. O.

Gas characteristics of an optico-acoustic gas analyser. Opt. i spektr. 8 no.2:247-252 F '60. (MIRA 13:10)
(Gases--Analysis)

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SALL', A.O.

Calculation of the error of an absorption analyzer of gas or liquid mixtures. Opt. i spektr. 8 no.4:571-573 Ap '60. (MIRA 13:11)
(Absoprtion) (Gases--Analysis)

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SALL', A.O.

Calculation of the chamber of a barooptical source of radiation.
Opt. i spektr. 8 no.5:731-733 My '60. (MIRA 13:9)
(Spectrum analysis)

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18

SALL, A-O

PHASE I BOOK EXPLOITATION SOV/5519

Kremlevskiy, P.P., Candidate of Technical Sciences, ed.

Teploenergeticheskiye i khimikotekhnologicheskiye pribory i regulyatory (Instruments and Regulators in Heat-Power and Chemical Engineering) Moscow, Mashgiz, 1961. 207 p. Errata slip inserted. 8,500 copies printed.

Ed. of Publishing House: G.A. Dudusova; Tech. Ed.: L.V. Shchetinina; Managing Ed. for Literature on the Design and Operation of Machines, Leningrad Department, Mashgiz: F.I. Fetisov, Engineer.

PURPOSE: This book is intended for engineers and technicians who construct, design, and operate industrial instruments and regulators.

COVERAGE: The book deals with new investigations in the field of automatic checking and regulation of heat-power and chemical industrial processes. The following problems are discussed: improvement of two-position control operation; effect of mass action and damping on proportional control; new proportional plus integral and programming electronic regulation systems; complete automation of open-hearth furnaces; automation of boilers with variable load capacity; measurement of pulsating flow; measurement of dust flow; ultrasonic and magnetic-induction flowmeters; pneumatic compensating differential manometers; aggressive-fluid flowmeters; new magnetic and optical-acoustical gas analyzers; concentration meters; and chlorine and coagulant regulators. The book is the fifth in a series containing reports on the investigations carried out by the Section on Heat-Engineering Control Instrumentation and Automation of the Leningradskoye otdeleniye Nauchno-tekhnicheskogo obshchestva priborostroitel'noy promyshlennosti (Leningrad Branch of the Scientific and Technical Society of the Instrument-Building Industry.) All the articles presented in this book were discussed either at sessions of the above section or at the conference on measurements of mechanical quantities called by the section, the VNIIM (Vsesoyuznyy nauchno-issledovatel'skiy institut metrologii im. D.I. Mendeleyeva -- All-Union Scientific Research Institute of Metrology imeni D.I. Mendeleyev), and the Leningradskiy dom uchenykh im. A.M. Gor'kogo (Leningrad Home for Scientists imeni A.M. Gor'kiy). No personalities are mentioned. There are 65 references: 41 Soviet, 20 English, and 4 German. References accompany most chapters.

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pulsating flow; measurement of dust flow; [illegible] induction flowmeters; pneumatic compensating differential manometers; aggressive-fluid flowmeters; new magnetic and optical-acoustical gas analyzers; concentration meters; and chlorine and coagulant regulators. The book is the fifth in a series containing reports on the investigations carried out by the Section on Heat-Engineering Control Instrumentation and Automation of the Leningradskoye otdeleniye

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SALL', Anatoliy Ottovich; IVANOV, B.N., inzh., red.; FOMICHEV, A.G., red. izd-va; GVIRTS, V.L., tekhn. red.

[Modern industrial infrared (optico-acoustical) gas analyzers] Sovremennye promyshlennye infrakrasnye (optiko-akusticheskie) gazoanalizatory. Leningrad, 1961. 16 p. (Leningradskii Dom nauchno-tekhnicheskoi propagandy. Obmen peredovym opytom. Seriia: Pribory i elementy avtomatiki, no.17) (MIRA 15:3) (Eudiometer) (Infrared rays--Industrial applications)

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B156/B101

AUTHOR: Sall', A. O.

TITLE: New industrial optical-acoustical gas analyzers

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 2, 1962, 321, abstract 2I125 (Sb. "Teploenerg. i khimikotekhnol. pribory i regulyatory". M.-L., Mashgiz., 1961, 177-192)

TEXT: The reasons for the principal working characteristics of optical-acoustical infra-red absorption gas analyzers with two differential radiation receivers or one radiation receiver, also of instruments with gas compensation in a comparison channel, and with a reflecting compensating chamber, are analyzed. The most effective methods of reducing error and linearizing the scale are given for instruments with gas compensation: 1) achievement of the best possible optical spectral symmetry for the comparison and working radiation currents by reducing the zero gap by adding the component to be determined into a filter chamber in the working current, the concentration added being such that the product of the length of the filter chamber and the concentration of the component being

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SALL', A.O.

Effect of superposing the absorption spectra of the determinable and the interfering component in absorption spectrum analysis. Opt. i spektr. 10 no.6:806-808 Je '61. (MIRA 14:8)
(Absorption spectra)

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SALL', A.O.

Sensitivity threshold of optical absorption analysis of the composition of mixtures, liquids or gases. Opt. i spektr. 11 no.5:667-671 N '61. (MIRA 14:10)
(Absorptiometer)

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SALL', A.O.

Theory of selectivity of optical absorption analyzers of the composition of gaseous or liquid mixtures. Opt. i spektr. 11 no.5:672-678 N '61. (MIRA 14:10)
(Absorptiometer)

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SALL', A.O.

Theory of the selectivity of optical absorption analyzers of the composition of gaseous or liquid mixtures. Opt. i spektr. 11 no.6:759-764 D '61. (MIRA 14:11)
(Spectrum analysis)

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"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001446910002-4

SALL', A.O.

Increasing the durability of asphalt-concrete pavements by surface treatment. Avt.dor. 27 no.1:16-17 Ja '64. (MIRA 17:4)

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SALLAI, Bela

Achievements and tasks in the field of our labor movements. Geod kart 14 no.5:335-337 '62.

1. Budapesti Geodeziai es Terkepeszeti Vallalat fooszyalyvezeto mernoke.

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SALIAI, Gyula

Concrete radiator. Epuletgepeszet 9 no.4:118-133 '60.

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MACSKASSY, Arpad, dr.; SALLAI, Gyula

Dimensioning of ribbed air heaters. Epuletgepeszet 13 no. 1: 1-9 F '64.

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SALLAI, Janos (Miskolc)

Is any recompensation due for an experimental specimen? Ujit lap 14 no.13:30 10 Jl '62.

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SALLAK, Sandor

Some questions of soil rating and a proposal for the principles of the genetic soil classification based upon soil rating. Agrokem talajtan 11 no.3-4:469-480 D '62.

1. Orszagos Mezogazdasagi Minosegvizsgalo Intezet Talajtani Osztalya, Miskolc.

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NEMES, Bela, dr.; SALLAI, Sandor, dr.; KOLESZAR, Gyula, dr.

ECG changes in epidemic keratoconjunctivitis in childhood.
Gyermekgyogyaszat 14 no.6:172-174 Je '63.

1. Hajdu-Bihar Megyei Tanacs Korhaz Szemeszeti Osztalya es a Megyei Tanacs Szivgondozo Intezete.
(KERATOCONJUNCTIVITIS) (ELECTROCARDIOGRAPHY)
(MYOCARDITIS) (VIRUS DISEASES)

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NEMES, Bela, dr.; SALLAI, Sandor, dr.; KOLESZAR, Gyula, dr.

ECG changes in epidemic keratoconjunctivitis in childhood.
Gyermekgyogyaszat 14 ho.6:172-174 Je '63.

1. Hajdu-Bihar Megyei Tanacs Korhaz Szemeszeti Osztalya es a Megyei Tanacs Szivgondozo Intezete.
(KERATOCONJUNCTIVITIS) (ELECTROCARDIOGRAPHY)
(MYOCARDITIS) (VIRUS DISEASES)

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TAKACS, I.; NYIRI, I.; SALLAY, G.

Effect of gynaecological operations and preoperative medication on adrenocortical activity. Acta chir. Hung. 2 no.2:139-150 '61.

1. Department of Obstetrics and Gynaecology (Director: Professor Dr S. Arvay), University Medical School, Debrecen.
(GYNECOLOGY surg.) (ADRENAL CORTEX physiol.)
(PREOPERATIVE CARE)

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SALLAY, ISTVAN

HUNGA

Preparation of nitroaryl ketones from aminoaryl ketones. István Sallay and Gábor Fodor (Univ. Szeged). *Acta Chem. Acad. Sci. Hung.* 2, 57-60(1952)(in English).—Adding 1020 g. AcCl to a stirred suspension of 4200 g. $AlCl_3$ and 1200 g. AcNHPh in 5500 ml. CS_2 and working up the mixt. by the procedure of Kunckell [*Ber.* 33, 2641(1900)] yielded 1342 g. (85.3%), *p*-$AcNHC_6H_4Ac$ (I), m. 162-4°. *p*-$H_2NC_6H_4Ac$ (II) (7.18 g.), prepd. from I by K.'s procedure, was diazotized in 20 ml. concd. HCl and 100 ml. H_2O by adding 3.7 g. $NaNO_2$ in 15 ml. H_2O at 0°, the Ca diazotate (III) formed by pouring the soln. onto 10 g. $CaCO_3$ with vigorous stirring, and the III added over 4 min. to an intensively stirred aq. suspension (100 ml.) contg. 75 g. $NaNO_2$, 15 g. $CuSO_4$, giving 10 g. crude *p*-$O_2NC_6H_4Ac$ (IV), m. 68-77°; distn. at 1 mm. pressure yielded pure IV, m. 73-80°. Crude IV was formed in 38% yield by adding III to a soln. of $NaNO_2$, $CuSO_4$, and Na_2SO_3, and in 34% yield by prepg. the diazonium borofluoride from II and treating it with $NaNO_2$, $CuSO_4$ and Cu_2O. IV thiosemicarbazone, m. 222°. M. D. Armstrong

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SALLAY, I.

HUNG.

Sphingosin and sphingolipides. XI. Simple preparation of the DL-*erythro*-2-amino-1,3-octadecanediols. I. Sallay, F. Dutka, and G. Fodor (Univ. Szeged, Hung.). *Acta Chim. Acad.* 37, 778-85(1954)(in German).—H_2SO_4-dried Br (717 g.) was added (3 hrs.) to 512.5 g. palmitic acid (I), m. 62-4°, previously ground with red P, the mixt. kept 6 days (35-45° and room temp. at nights), then warmed slowly *in vacuo* to 75-80° (5 hrs.), and a soln. of the residue in 600 ml. petr. ether at −18° washed with three 100-ml. portions of ice H_2O. Attempted distn. (at 0.01 mm.) of 700 gm. dried ($MgSO_4$) and C treated, crude $C_{16}H_{33}CHBrCOBr$ (II) caused decompn. II (515.2 g.) was added (3.5-4 hrs.) to 627 g. N_2CHCO_2Et (III) and the mixt. kept overnight at 20°, then warmed at 30-5° until N evolution ceased (4-5 hrs.), giving 615 g. crude $C_{16}H_{33}CHBrCOC(:N_2)CO_2Et$ (IV), m. 43-52°, crystd. from EtOH, m. 58-9°. Crude IV in 1500 ml. alc. treated with 36.5 (sic) ml. 8.08% alc. HCl (0.9 moles) was hydrogenated with 40 g. 11.1% Pd-C prereduced in 500 ml. alc., concd. 1/3, and chilled, giving 77.5 g. ppt.; further concn. gave an addnl. 32.3 g. Two crystns. from EtOAc (10 g./30 ml.) gave DL-$C_{16}H_{33}COCH(NH_2)CO_2Et$ (V) HCl salt, m. 114-16° (from alc.); V HBr, m. 111-12.5°. IV in hexane with Pd-C was hydrogenated to Et 2,5-dipentadecyldihydro-3,5-pyrazinedicarboxylate (VI), m. 73-4° (from alc.). V.HBr (0.84 g.) and 0.16 g. NaOAc in 15 ml. H_2O treated 10 min. with 2.04 g. Ac_2O gave VI. A mixt. of 27 ml. Ac_2O, 35 g. AgOAc, 75.57 g. V.HCl, and 600 ml. MeOH shaken 5 hrs. in the dark, boiled 5-10 min., filtered hot, and the filtrate chilled gave 62.2 g. crude DL-$C_{16}H_{33}COCH(NH_2)CO_2Et$ (VII), m. 63-8°; crystn. from

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300 ml. hexane yielded 53 g., m. 71–3°. [illegible] crude V.HCl gave 74.5% crude VII, m. 69–71°. VII 2,4-dinitrophenylhydrazone m. 105.5–7° (from MeOH). To II 5 $NaBH_4$ in 50 ml. cold MeOH contg. 5 drops 20% KOH was added (15–20°) 7.54 g. IV.HCl in 200 ml. abs. MeOH, and the mixt. treated after 12 hrs. at 20° with 200 ml. H_2O and extd. with five 50-ml. portions of Et_2O; the $MgSO_4$-dried ext. gave (at 5–10°) with dry HCl 4.76 g. crude (m. 110–11°) *threo-* and *erythro*-racemates of $C_6H_5CH(OH)CH(NH_2)CO_2Et$ (VIII) HCl salt; m. 118–20° (from EtOAc). Similarly, VII with $NaBH_4$ yielded 51% *N*-Ac deriv. (IX) of VIII, m. 89–90° (from EtOAc). VIII.HCl with Ac_2O-AgOAc gave IX. IX heated with Ac_2O-NaOAc gave the *O,N-di*-Ac deriv. of VIII, m. 98.5–9.5° (from Me_2CO). A suspension of 1.9 g. VIII.HCl in 30 ml. Et_2O was shaken 10 min. with a soln. of 50 ml. 5% NaOAc and 5 ml. N NaOH; the Et_2O soln. of VIII was washed with 10 ml. H_2O, dried ($MgSO_4$), and the VIII in 60 ml. Et_2O treated with 0.55 g. $LiAlH_4$ in 20 ml. Et_2O and, after 15 hrs., with 5 ml. EtOAc and 10 ml. H_2O, giving 1.29 g. waxy product, which, in Et_2O, yielded with dry HCl the racemates of $C_6H_5CH(OH)CH(NH_2)CH_2OH$ (X) HCl salt (0.75 g.), m. 250–4° (from EtOAc). X.HCl with Ac_2O-AgOAc gave DL-*erythro-N*-acetyl deriv. (XI) of X, m. 118–21° (from EtOAc). IX with $LiBH_4$ (equimolar LiI and $NaBH_4$) yielded 87.5% crude XI, which was crystd. from MeCN. $SOBr_2$ (28.56 g.) was added (2.5 hrs.) to 51.2 g. I at 75°; the mixt. heated 4 hrs. at 90°, treated with 20 ml. dry C_6H_6, and the C_6H_6 removed *in vacuo* with the excess $SOBr_2$, leaving 52.4 g. crude C_6H_5COBr (XII). XII (63.9 g.), was

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added (10–15°) to 45.0 g. III in 40 ml. petr. ether, and the mixt. kept 1 day at 0° and 2 days at 20°, then treated with 19.7 g. pyridine in 50 ml. petr. ether; the 1-carbethoxymethylpyridinium bromide (41.3 g.) which pptd. m. 112–15° (from $CHCl_3$). The filtrate, washed with three 30-ml. portions of H_2O, five 30-ml. portions of 10% HCl, and three 30-ml. portions of *N* KOH, dried ($MgSO_4$), concd. *in vacuo*, and the residue (65.5 g.) crystd. at 0° and dried on a cold clay plate gave 44.8 g. $C_{15}H_{11}COCH_2CO_2Et$ (XIII), m. 35–8° (from EtOH). XIII hydrogenated in HBr-EtOH gave V.HBr. George L. Sutherland

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SALLAY, I.

13. Stereochemical and synthetic studies in the sphingosine field, X. Preparation of several long-chain aliphatic ketones (In German) — I. Sallay (*Acta Chimica Academiae Scientiarum Hungaricae*, — Vo. 5. 1955, No. 3—4, pp. 349—356).

The author succeeded in preparing 3-heptadecen-2-one from 2-hexadecenoyl chloride and dimethyl cadmium. This product represents the decisive compound in the complete synthesis of sphingosine. Long-chain α, β-unsaturated ketones *e. g.* 3-octadecen-2-one were also prepared by the Krapivin method from the corresponding olefin with the use of acetyl chloride. A process has been evolved for the preparation of homogeneous olefin components. The position of the double bond was identified by ozonolysis.

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SALLAY, I.

G-3

HUNGARY/Organic Chemistry - Natural Substances and Their Synthetic Analogues.

Abs Jour : Ref Zhur - Khimiya, No 7, 1958, 21601

Author : G. Fodor, I. Sallay, F. Dutka
Inst : -
Title : Quaternary Ammonium Salts Derived of (-)-Lupinine.

Orig Pub : Acta phys. et chem. Szeged, 1956, 2, No 1 -4, 77-79

Abstract : The configuration of the oxymethyl group with respect to the N atom in (-)-lupinine (I) was studied. Epimer iodides were prepared by the action of $CH_2ICOOC_2H_5$ (II) on I.

The epimer (III), melting point 154°, $[\alpha]^{24}_D = -49.06°$ (c = 1.591), was prepared at about 20° of 1.07 g of I and 1.284 g of II in 3 mlit of absolute C_6H_6. The epimer (IV), melting point 148 to 150°, $[\alpha]^{24}_D = -84.76°$ (c = 1.05), was obtained of 0.354 g of I and 0.428 g of II in

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Stereochemistry of pyrrolizidine alkaloids. II. The configuration of retronecine and of related compounds. G. Fodor, I. Sallay, and P. Dutka (Univ. Szeged, Hung.). *Acta Univ. Szegediensis, Acta Phys. et Chem.* [N.S.] 2, 80–4 (1956)(in English); cf. *C.A.* 49, 15919c.—O-Acetylretronecan-7-ol was quaternized with CH_3I CO_2Et. The ester

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115

CA.

Callicrein content of saliva during physiological changes and in paradentosis. Kornélia Sallay and Károly Nádor (Tudományegyetemi Stomatológiai Klinika, Budapest). *Orvosi Hetilap* 89, 337-9(1948).—In saliva from 14 young men aged 8-18 and from 14 men aged 45-78 callicrein was detd. by comparing the effects on blood pressure of atropinized dogs with the effects of a standard padutin prepn. Saliva of aged men contains 4-5 times as much callicrein as saliva of young men; the mean values were 5.04 and 1.33 units, resp. Daily or hourly variations of callicrein in saliva of the same person were insignificant. The amt. of callicrein was not influenced if the excretion of saliva was diminished by administration of atropine. In paradentosis the callicrein content of saliva was about 5-6 times higher than that of healthy control persons of the same age group. No significant deviation could be observed in caries or gingivitis ulcerosa. Increase of callicrein content of saliva was higher the more severe the paradentosis. I. F.

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"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001446910002-4

SALLAY, K.
(6435)

Ujabb vizsgalatok a nyal kallikreinjerol Chemical investigations on the kallikrein of saliva Fogorvosi Szemle, Budapest 1949, 42/2-3 (105-108)

When saliva or purified kallikrein (padutin) is boiled for some minutes it is inactivated. Boiling for a longer time restores almost half the original activity. The substance released by boiling is not histamine, although its action is inhibited by treatment with dehistin (an antihistaminic). Kallikrein is regarded as a hormonal agent of the salivary glands, acting on intestinal secretions.

Straub-Szeged

So: Excerpta Medica, Vol. II, No. 12, Sec. II, December 1949

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SALLAY, Kornelia, dr.

Oral manifestations of the Sjoegren syndrome. Fogrov. szemle 47 no.5:157-160 May 54.
(SJOEGREN SYNDROME, manifestations
oral manifest.)
(MOUTH, in various dis.
Sjoegren synd.)

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SALLAY, Kornelia, dr.

WALLNER, Emil, dr.; SALLAY, Kornelia, dr.

Treatment of glossopyrosis with follicular hormone. Fogorv. szemle 47 no.7:226-232 July 54.

1. Budapesti Stomatologiai Klinika kozlemenye (Igazgato: Balogh Karoly dr., egyet. tanar)
(TONGUE, diseases,
glossopyrosis, ther., follicular hormone)
(ESTROGENS, therapeutic use,
glossopyrosis)

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KOSIK, Pal; SALLAY, Melanie; ZIMANYI, Magda

Problems of thermal conductivity in case of complex boundary conditions.
Mat kut kozl MTA 4 no.3/4:377-383 '59. (EEAI 9:9)
(Heat) (Boundary value problems)

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SALLAY, Melanie

A problem of approximation with boundary conditions. Mat kut kozl MTA 6 no.1/2:65-69 '61.

(Approximate computation)

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"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001446910002-4

FREUD, G.; SALLAY, M.

Contribution to the velocity of the convergence of development according to the proper functions of Sturm-Liouville. Mat kut kozl MTA 6 no.3:271-279 '61.

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