

ORATOVSKIY, M.T., kand. sel'skokhozyaystvennykh nauk

Results obtained from grafting young sweet cherry seedlings on
sour cherry crowns. Agrobiologiya no.4:618-619 Jl-Ag '60.
(MIRA 13:8)

1. Melitopol'skaya optynaya stantsiya sadovodstva.
(Cherry)

ORATOVSKIY, V. I. Cand Tech Sci -- (diss) "Absorption of carbonic acid by /
solution of caustic-soda during the diffusion of liquid by means of gas flows."
Stalino, 1959, 20 pp (Min of Higher and Secondary Specialized Education UkrSSR.
Donets Order of Labor Red Banner Industrial Inst), 150 copies (KL, 52-59, 121)

KUZNETSOV, M.D., LEONENKO, V.M., ORATOVSKIY, V.I.

Absorption of naphthalene from coke-oven gas by solar oil in
an apparatus pulverizing the liquid by a stream of gas. Koks i
khim. no.3:34-36 '60. (MIRA 13:6)

1. Donetskiy industrial'nyy institut.
(Butchenkovo--Naphthalene) (Butchenkovo--Coke-oven gas)

KUZNETSOV, M.D.; LEONENKO, V.M.; ORATOWSKIY, V.I.

Analysis of the operation of primary tubular coolers. Voks i s. iz.
no. 3:44-46 '61. (MIRA 14:4)

1. Donetskiy politekhnicheskiy institut.
(Coke-oven gas)

KUZNETSOV, M.D.; ORATOVSKIY, V.I.

Rate of chemical sorption in a Venturi-type apparatus. Izv.vys.
ucheb.zav.; khim.i khim.tekh. 4 no.1:142-147 '61. (MIRA 14:t)

1. Donetskij industrial'nyy institut, kafedra khimicheskoy
tekhnologii topliva i protsessov i apparatov.
(Venturi tubes)

ANDREYEV, A.Ya.; ORATOVSKIY, V.I.

Calcination of magnetite in an apparatus with a fluidized bed.
Trudy IREA no.25:450-456 '63. (MIRA 18:6)

ORATOVSKIY, V.I.; GEYSHIN, P.A.; GAMOL'SKIY, A.M.

Continuous distillation of ammonium sulfide. Trudy IREA no.25:
457-460 '63. (KIRA 18:6)

REVZIN, I.G.; ORATOVSKIY, V.I.; PALEY, N.A.

Preparation of granulated magnesium nitride by a continuous
method. Trudy IREA no.25:465-469 '63.

(MIRA 18:6)

AMERICAN INSTITUTE OF POLYGRAPH EXAMINERS

CONFIDENTIAL INFORMATION CONTAINED HEREIN IS UNCLASSIFIED
DATE 08-01-01 BY SP-1

• Dispatched from the laboratory to the
Intelligence Agency for analysis and reporting.
Report will be issued at a later date.

ABOV, Yu. G.; KRUPCHITSKIY, P. A.; ORATOVSKIY, Yu. A.

"On the existence of inter nucleon potential nonconserving space parity."

report submitted for Int'l Conf on Low & Medium Energies Nuclear Physics,
Paris, 2-6 Jul 64.

ABOV, Yu.G.; KRUPCHITSKIY, P.A.; ORATCVSKIY, Yu.A.

Existence of an internucleon potential not maintaining spatial parity. IAd. fiz. 1 no.3:479-489 Mr '65. (MIRA 18:5)

1. Institut teoreticheskoy i eksperimental'noy fiziki Gosudarstvennogo komiteta po ispol'zovaniyu atomnoy energii SSSR.

ACC NR: AP6030156

(A)

SOURCE CODE: UR/0120/66/000/004/0195/0196

AUTHOR: Abov, Yu. G.; Bulgakov, M. I.; Gul'ko, A. D.; Yermakov, O. N.; Krupchitskiy P. A.; Oratovskiy, Yu. A.; Trostin, S. S.

CAG: Institute of Theoretical and Experimental Physics, GKAZ, Moscow (Institut teoreticheskoy i eksperimental'noy fiziki GKAZ)

TITLE: Production of polarized beams of thermal neutrons by means of a pile of cobalt mirrors

SOURCE: Pribory i tekhnika eksperimenta, no. 4, 1966, 195-196

TOPIC TAGS: neutron beam, thermal neutron, nuclear research reactor, cobalt, neutron polarization, collimator

ABSTRACT: A unit for the production of polarized neutron beams needed for experimental purposes is described. The unit, shown below, consists of a collimator and a pile of cobalt mirrors. The collimator, consisting of 10 convergent slits separated by vertical steel plates, is placed in the horizontal channel of a reactor. Each of the cobalt mirrors is backed by glass and the length of each mirror is made up of three separate units 350 x 125 x 3 mm³ in size. The top and bottom ends of the mirrors are fitted into 10 slots bored through the connecting strips and clamped with wedge clamps so that each mirror has a corresponding slit in the collimator.

Card 1/3

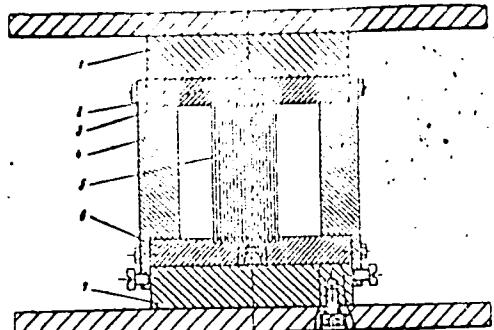
UDC: 539.1.078.539.125.5

ACC NR: AP6030156

The pile of mirrors is set into an electromagnet. The mean angle of beam incidence on a corresponding mirror is 7.5° and all neutron beams reflected by the mirrors converge at a distance of 4.5 m from the pile of mirrors. The incident and reflected beams are separated by means of a sliding screen system made of boron carbide situated near the target. The flow of polarized neutrons on a specimen with an area of $100 \times 10 \text{ mm}^2$ amounted to 3×10^7 neutrons/sec. The degree of neutron beam polarization amounted to - 90%, and the polarization efficiency of 95%. The authors thank V. A. Boketov and N. S. Shatlovskaya for making the cobalt mirrors, Yu. Ya. Garrison for assembling the pile of mirrors, and A. I. Savushkin, V. K. Rissukhin, O. M. Svetlov, and I. L. Karpikhin for helping with the measurements. Orig. art. has: 1 figure.

Cord 2/3

ACC NR: AP6030156



1. upper magnetic pole, 2. wedge clamp, 3. upper connecting strip, 4. side wall (brass), 5. cobalt mirror, 6. lower connecting strip, 7. lower magnetic pole

SUB CODE: 20, 18/ SUBM DATE: 31Jul65/ ORIG REP: 001/ OTH REP: 002

Cord 3/3

5.3010

7/2/77
SCV 7-34-12-4-1

AUTHORS: Davankov, A. B., Pratynskaya, A. N., Laufer, V. M., Lipinskiy, A. G.

TITLE: Deionization of Acid Albumin Hydrolysates by Anion-Exchange Resins

PERIODICAL: Zhurnal prikladnoy khimii, 1959, Vol 32, No 1, p. 2269-2275 (USSR)

ABSTRACT: Various domestic ion-exchange resins were tested for the separation of amino acids from the mineral acid residue in casein hydrolysates. Silicic acid, MMG-1 and AN- α F, medium basic N-C and EDE-1CP, and strong basic AV-16 anion-exchange resins were investigated. EDE-1CP and AN- α F resins gave the best results. The adsorption of Cl⁻ and SO₄²⁻ was complete, and that of amino nitrogen insignificant. The amount of protein can be adequately determined by titration of the filtrate. When pH < 3.5, the deionized solution is salty (~3%); at pH = 3.5-4.5, the Cl⁻ content

Card 1/2

Detachment of FBI Account of the
Attack-Exchange Period.

SUPERIOR: [REDACTED]

Card 67

IVANCENKO, Dimitrij, prof. dr. inz.; ZAJAC, Peter, inz.; ORAVCOVA, Anna, inz.

Isolation of tyrosine and leucine from maize gluten. Chem zvesti
18 no.2:148-151 '64.

1. Department of Hydrocarbon Chemical Technology, Slovak Higher
School of Technology, Bratislava, Kollarovo namesti 2.

CULTURE AND CIVILISATION

311 - 11 AX - 1966-10-10 - 100% - 100% - 100% - 100% - 100%
100% - 100%

Time, Activities at Home, Name, No., etc.

169

NOVAK, A.; ORAVCOVA, V.; VASKEBOVA, M.

Contribution to meningoencephalitis mumps Česk pediat
13 no. 3: 109-113 (1963).

1. detska klinika Lekarskej fakulty UK v Bratislave,
prednosta prof. dr. J. Michaličkova Krajska hygienicko-
epidemiologicka stanica v Bratislave, riaditeľ dr. F.
Šmalz.

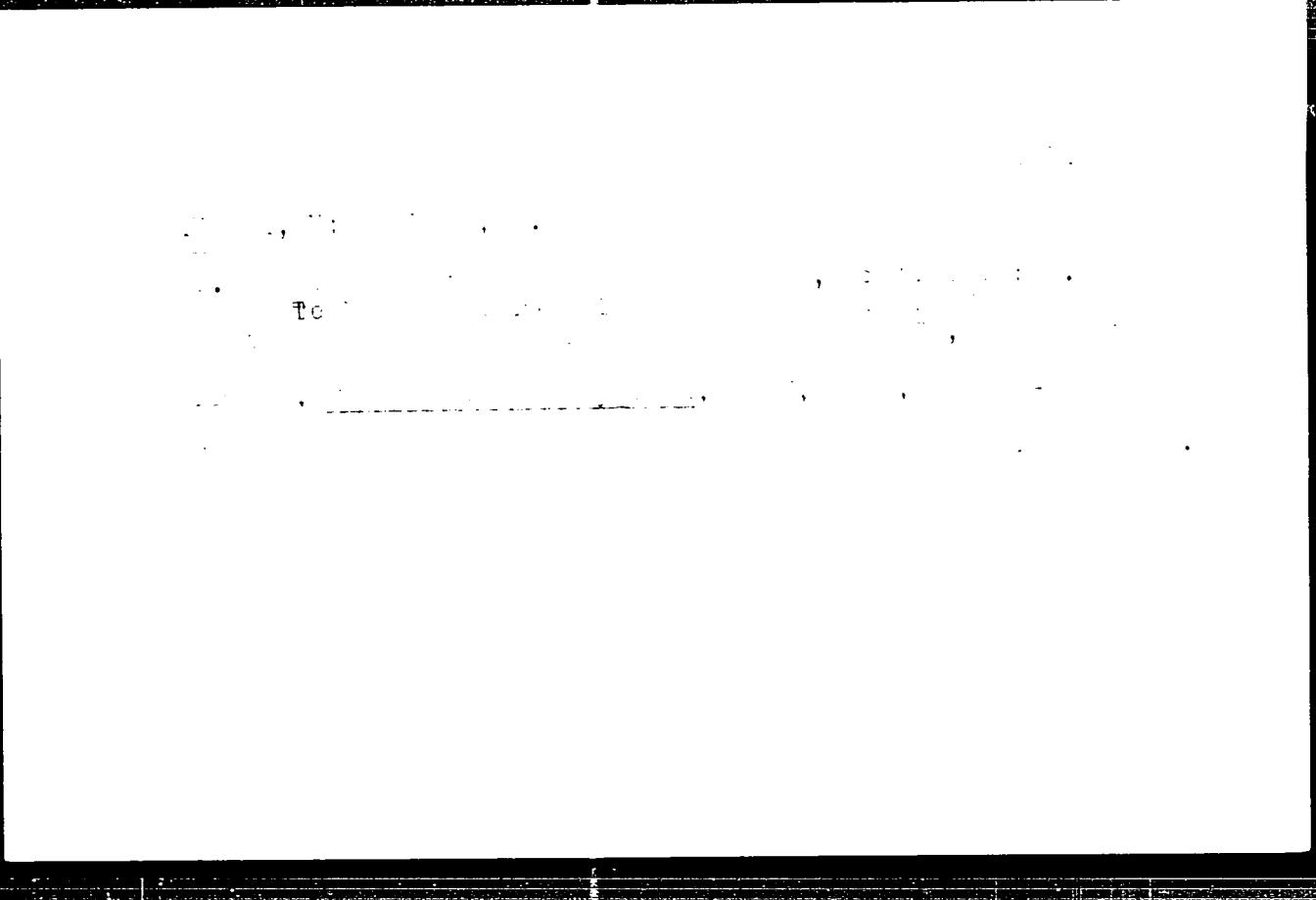
(M. P. S. - Meningoencephalitis)

BARIOS, V.; UFEKOVÁ, E.; ELISCHEROVÁ, K.; MITTERMAYER, T.;
BILCIKOVÁ, M.; JUFFCOVÁ, K.; CATAK, G.; MILLEROVÁ, M.; ORAVČOVÁ, V.

Tatryna virus infections among the population of eastern Slovakia.
Bratislavské lek. listy 45 no.8:501-509 31.6.1965.

1. Výskumný ústav epidemiologie a mikrobiologie v Bratislavě
(ředitel doc. MUDr. J. Karolček), Infekčné oddelenie Fakultnej
nemocnice v Košiciach (vedúci primár MUDr. T. Mittermayer),
Výskumné laboratórium parazitologie a mykologie pri Katedre
všeobecnej biologie Lekárskej fakulty Univerzity Komenskeho
v Bratislave (vedúci prof. MUDr. V. Vršanský) a Krajska
hygienicko-epidemiologicka stanica v Bratislavě (ředitel
MUDr. F. Schulz).

"APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R001238



APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0012381

NIZNANSKY, F; CHMEL, L; ORAVEC, C.

Studies on dermatomycosis in Slovakia. Cas. cesk. vet. 5 no.14:324-
326 25 July 1950.
(CLML 20:1)

1. Work jointly conducted by State Health Institute, Dermatological
Clinic of the Medical Faculty at Slovak University, and State Diag-
nostic Veterinary Institute in Bratislava.

ORAVEC C.

Kasť pripramienky k problemu vysetrovania osôb na nosičstvo
choroboplochých zarodkov, cinných v potravinárskom priemysle.
(Problem of detecting active carriers in food industries)
Sloven lekar 12:8 Aug 50 p. 422-4.

1. Of the Health Referat of the Regional National Committee in Bratislava and of the Department for Epidemiology and Laboratory Research for Infectious Diseases of the State Health Institute. CLML Vol. 20, No. 2 Feb 1951

RAVEC C.

Prieskum dermatomykóz na Slovensku. *Dermatomycosis in Slovakia?*
Sloven lekar 12:8 Aug 50 p. 431-3.

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

MICHALICKOVA, J.; ORAVEC, C.; KILLINGER, Z.

Coli bacteria infections and toxic dyspepsia in children treated with aureomycin. Bratislavské lekárske listy 31 no. 3-4:392-405 1951. (CLML 21:1)

1. Of the Children's Clinic of the Medical Faculty of Slovak University, Bratislava.

ORAVEC, C

✓ 7 E ✓ H

Biochemical properties of the intestinal flora in cancer of the digestive tract. L. Bahna and C. Oravec (Oncologicky institut, Bratislava, Czech.). *Cancer*, 1, 103-18 (1954).—Results from more than 32,000 biochem. tests revealed that microorganisms cultivated from the feces of patients with cancer more often ferment sorbitol, sorbose, D-arabinose, xylose, lactose, mannitol, glucose, and galactose and less frequently inositol than those cultivated from healthy persons.

L. J. Urbanek

Oravec, C.

C Z E C H

The antigen-antibody reaction as measured by light-scattering. A. Winkler, C. Oravec and S. Hupka (Výsk. ústav onkologický, Bratislava, Czech.). Českoslov. Onkol. I, 243-8 (1954).—The combination of Vi ext. prep. from *Salmonella bollerup* and rabbit antiserums was measured by light scattering at different concns. This method enables quant. analysis of the reaction and its kinetics. L. J. U.

ORAVEC, CTIRAP

Reaction of antigen with incomplete antibody. Alois Winkler, Stefan Huska, Ctirad Oravec, and Irena Winklerova (Vyzkumný ústav onkologický, Bratislava, Czech.). Chem. Listy 69, 1075-80 (1985).—A specific reaction of the antigen with an incomplete antibody was studied. As a reaction criterion was used the increase in the mol. wt. of a mixt. of horse-serum albumin and homologous ram-serum globulin above the expected value. A nonspecific interaction of horse-serum albumin with nonimmune-ram globulin was noticed, much slighter than that with immune-ram globulin.

M. Hudlický

(3)

ORAVEC, Citrad; HOLOUBEK, Viktor; KMETY, Emil

Properdin system in tumors. I. Properdin level in normal and in tumor-bearing patients. Cesk. onkol. 3 no.4:274-278 1956.

1. Onkologisches Forschungsinstitut in Bratislava.
(IMMUNITY,

properdin in cancer & normal subjects (Ger))
(SERUM GLOBULIN,
same)
(NEOPLASMS, immunology,
same)

ORAVEC, Citrad; HOLOUBEK, Viktor; BAZANY, Miroslav

The properdin system in tumorous disease. II. The level of properdin in healthy and tumorous fowls (tumour B 77). Cesk. onkol. 3 no.4:279-283 1956.

1. Oncological Research Institute, Bratislava.
(IMMUNITY,
properdin in exper. sarcoma B 77 and in normal fowls)
(SERUM GLOBULIN,
same)
(NEOPLASMS, experimental,
sarcoma B 77, comparison of properdin in normal &
tumor-bearing fowls)
(SARCOMA, experimental,
B 77, comparison of properdin in normal & tumor-bearing
fowls)

ORAVEC, CTIRAD

✓ Reaction of antigen with incomplete antibody. Alojz
Winkler, Stefan Hupka, Ctirad Oravec, and Irena Winkler-
uvá. Collection Czechoslov. Chem. Commun. 21, 84-92
(1956)(in German). See C.A. 49, 13407h. B.I.C.

EXCERPTA MEDICA Soc 5 Vol. 11/8 Gen. Pathology Aug 58

1857. THE PROPERDIN SYSTEM IN A TUMOROUS DISEASE. III. THE TIME
SEQUENCE OF CHANGES IN THE LEVEL OF PROPERDIN IN RABBITS
WITH BROWN-PEARCE CARCINOMA - Oravec C., Holoubek V.
and Bazany M. Oncol. Res. Inst., Bratislava - NEOPLASMA 1957,
4/1 (3-6) Tables 2

The role of the time factor in the changes of the level of properdin in rabbits with Brown-Pearce carcinoma was studied. At the beginning of the disease a significant rise and with the progress of the disease, between the 14th and 23rd day, a decline in the properdin level was observed. In resistant animals the character of the changes seems to be the same, with a more pronounced duration of the rise of properdin level in retransplanted animals. Stasney - Philadelphia, Pa. (V, 16)

CZECHOSLOVAKIA / General Problems of Pathology.
Immunity.

U

Abs Jour: Ref Zhur-Biol., No 9, 1958, 41564.

Author : Cravos, C., Holoubek, V., Kovarova, V., Klinec, M.,
Bazany, M.

Inst : Not given.

Title : The Properdin System in a Tumorous Disease. IV.
The Level of Properdin in Guinea Pigs Treated
with Cortisone, X-rays and with Herpes Virus.

Craig Pub: Neoplasma, 1957, 4, No 1, 7-9.

Abstract: The investigations were conducted in connection
with the effectiveness of experiments on hetero-
transplantation of tumors with application of cor-
tisone and X-ray irradiation. Guinea pigs were
injected, for a period of 5 days, with 2.5 mg of
cortisone acetate intra-abdominally, or were once
irradiated with 600 r, or were infected intrader-

Card 1/2

ORAVEC, Ctirad
SMIDA, Julius; HOLOUBEK, Viktor; KOVAROVA, Valeria; ORAVEC, Ctirad

Some aspects on the immunobiological behavior of the virus tumour B-77.
Neoplasma, Bratisl. 4 no.4:327-333 1957.

1. Oncological Research Institute, Bratislava.
(VIRUSES, eff.
tumor B 77 virus, on hemagglut.)
(HESMAGGLUTINATION
eff. of tumor B 77 virus)
(NEOPIASMS, exper.
eff. of tumor B 77 virus on hemagglut.)

HOLOUSEK, Viktor; ORAVEC, Ctirad

Properdin system. Cesk. epidem. mikrob. imun. 6 no.5:339-344 Sept 57.

l. Vyskumny ustav onkologicky, Bratislava, riaditeľ člen kor. SAV
Viliam Thurzo.

(PROPERDIN,
review (Cz))

EXCERPTA MEDICA Sec 5 Vol 12/9 General Path. Sept 59

2518. THE PROPERDIN SYSTEM IN NEOPLASTIC DISEASE - Układ properdynowy w chorobie nowotworowej - Oravetz C. and Holoubek V. Oncol. Res. Inst., Bratislava - NOWOTWORY 1958, 873-4 (181-185)

The authors give a survey of their studies on the properdin system. To determine the serum properdin level a modified Pillemer's method and *Shigella dysenteriae* as test bacteria were used. The first series of experiments was concerned with the comparison of the properdin serum level in healthy individuals with that in

2518

persons with non-treated malignant tumours, it was found that in both groups the mean properdin value was the same, higher individual deviations from the mean value being observed only in persons with malignancy. Similar results were obtained in experiments with the serum of healthy hens and of those with sarcoma B77. In the next series of experiments, using rabbits with Brown-Pearce tumour, it was found that in the first stage of the neoplastic growth there was an increase in the properdin level as compared with healthy animals, but 23 days after transplantation of the tumour the properdin level was found to decrease, to equal finally that of healthy rabbits. Obviously, the neoplastic growth is accompanied by a decrease in the body resistance and the properdin level returns to normal. The examinations of rabbits resistant to the implantation of Brown-Pearce tumour also showed the increase in the properdin level which persisted longer than in non-resistant animals. The effect of cortisone on the properdin system of guinea-pigs was also studied. One group of animals was given cortisone acetate i.p.; the 2nd one was irradiated with X-rays, animals of both series being bled after 6 days; the 3rd group served as control. The first and 2nd group showed the reduction in the serum properdin level. The mechanism of this phenomenon has not yet been elucidated, it is likely to be related to the reticulo-endothelial system. It is felt that by inducing an increased properdin level of the body, one might achieve its augmented resistance to the neoplastic growth.

Albert - Wrocław (V, 16)

ORAVEC, Ctirad; HOLOUBEK, Viktor

The properdin system in tumorous diseases, V. Bacteriocidal properties of sera of some species. Neoplasma, Bratisl. 6 no.1:3-5 1959.

1. Oncological Research Institute, Bratislava., ul. Cs. armady 17.
(NEOPLASMS, immunol.

bactericidal properties of sera from cancer-bearing
animals, role of properdin)

(PROPERDIN, eff. on bactericidal properties of sera from cancer-
bearing animals)

EXCERPTA MEDICA Sec 14 "ol 7/11 Cancer November '59

4697. **Antibodies in tumorous disease. I. Antibodies against Daels's guinea-pig sarcoma, detected by the method of passive anaphylaxis** (DAEL C., HOLOUBEK V. and TITRZO V. Oncol. Res. Inst., Bratislava Neoplasma 1959, 6, 1 (6-9) Tables 1)

For the demonstration of antibodies against Daels's transplantable guinea-pig sarcoma the authors used the method of passive anaphylaxis. Guinea-pigs sensitized with the sera of diseased and resistant animals were used. The mitochondrial-microsomal fractions of tumours corresponding and homologous to the sera of the experimental animals served as antigens, and were applied in concentrations of 0.93 to 2.45 mg. N per 100 g. live weight of animal. After application of the antigen, anaphylactic reactions occurred in the sensitized animals. The nucleic fraction proved to be unsuitable, because it produced reactions similar to anaphylactic shock, even in non-sensitized controls.

ORAVEC, C.;SMDOVA-KOVAROVA, V.;KOSSEY, P.

Heterotransplantation of tumours--Part II. Heterotransplantation of Walker 256 carcinoma in hamster treated with cortisone, antigen, Antiserum and zymosan. Neoplasma, Bratisl. 6 no.3:262-267 1959.

1. Oncological Research Institute, Bratislava, CSR.
(NEOPLASMS transpl.) (CORTISON~~E~~ pharmacol.)
(ANTIGENS pharmacol.) (IMMUNE SERUMS pharmacol.)

ORAVEC, C.;SMIDOVÁ-KOVAROVÁ, V.;KOSSEY, P.

Heterotransplantation of tumours Part III. Viability of cells
of the Ehrlich Aseites mouse tumour hetero-transplanted to
adult rats treated and non-treated with cortisone, in the anterior
eye chamber, subcutaneously and intraperitoneally. Neoplasma,
Bratisl. 6 no.4:390-394 1959.

1. Oncological Research Institute, Bratislava
(NEOPLASMS exper.)
(EYE neopl.)
(CORTISONEX pharmacol.)

ORAVEC, C.

Antibodies in tumorous disease Part II. Evidence of cytotoxic anti-bodies against the Brown-Pearce rabbit tumour grafted in the anterior eye chamber of resistant animals. Neoplasma, Bratisl. 6 no.4:395-396 1959.

1. Oncological Research Institute, Bratislava
(NEOPLASMS immunol.)
(EYE neopl.)
(ANTIBODIES)

SMIDA, J., HOLOUBEK, V., ORAVEC, C., THURZO, V.

The properdin system in tumorous disease..Part VI. Influence of
the properdin fraction on the cancerogenic activity of chicken
tumour virus B77. Neoplasma, Bratisl. 7 no.1:26-30 '60.

1. Oncological Research Institute, Bratislava, CSR.
(PROPERDIN)
(NEOPLASMS exper.)

CHAVEC, C.; KMETY, E.

Effect of the leptospiral infection on Daels' sarcoma in guinea pigs. Neoplasma, Bratisl. 7 no.1 suppl:30-32 '60.

1. Vyskumny ustav onkologicky, Bratislava. Ustav mikrobiologie a epidemiologie Lekarskej fakulty Univerzity Komenskeho v Bratislave.
(NEOPLASMS exper)
(LEPTOSPIROSIS exper)

ORAVEC, C.; SMIDOVÁ-KOVAROVÁ, V.; KOSSEY, P.

Hetero-transplantation of Walker 256 carcinoma in hamsters
previously treated with cortisone, antiserum and symosan.
Neoplasma, Bratisl. 7 no.1 suppl:50-51 '60.

(NEOPLASMS exper)
(CORTISONE pharmacol)
(IMMUNE SERUMS pharmacol)
(POLYSACCHARIDES pharmacol)

SMIDOVÁ-KOVAROVÁ, V.; ORAVEC, C.; BAZANY, M.; KOSSEY, P.

Heterotransplantation of tumours. Part IV. Heterotransplantation
of Walker 256 rat carcinoma in hamsters treated with cortisone in
combination with normal rat organs antigen and with tumour antigen.
Neoplasma, Bratislava, 7 no.2:167-171 '60.

1. Oncological Research Institute, Bratislava, C.S.R.
(NEOPLASMS exper)
(CORTISONE pharmacol)

ORAVEC, C.; ONDRUS, B.

Lowering the resistance in hetero-transplantation of human tumors,
by immunological means which influence the recipient. Neoplasma,
no. 5: 509-522 '61.

1. Onkologisches Forschungsinstitut, Bratislava, und Institut
fur pathologische Anatomie, Medizinische Fakultat, Komensky-
Universitat, Bratislava, Tschechoslovakia.
(NEOPLASMS immunol) (CORTISONE pharmacol)
(ANTIGENS)

ORAVEC, C.; KMETY, E.

On the effect of biotherapy with leptospira on Dael's guinea pig sarcoma.
Neoplasma 9 no.5:465-476 '62.

1. Onkologisches Forschungsinstitut, Institut fur Epidemiologie der Med.
Fakultat der Komensky Universitat in Bratislava, CSSR.
(SARCOMA, EXPERIMENTAL) (LEPTOSPIRA)

ORAVEC, C.

Interaction of properdin system with tumorous cells. Neo-
plasma 11 no.1:47-50 '64

1. Institute of Cancer Research, Bratislava, Czechoslovakia.

*

SANDOR L., BA M.S.C., C.S.V.C. .

Struma simplex a jej liecenie. Struma simplex and its therapy?
Sloven. Lekar 12:6 June 50 p. 289-95.

1. Of the Institute of General and Experimental Pathology of Slovak University (Head -- Docent G. Bardos, M.D.) and of the Endocrinological Consultation Station of the Institute of National Health in Bratislava (Head -- Docent G. Bardos, M.D.).
CIT Vol. 20, No. 2 Feb 1951

ORAVEC, D. ZACHAR, D.

Pokusy o intratekalne ovplyvnenie glykemic a ich klinicka hodnotenie.
[Experimental studies on intrathecal glucose effect on glycemia and
its clinical evaluation] Bratisl. lek. listy 30:4-5 Apr-May 50
p. 391-6

1. Of the First Internal Clinic and of the Neuro-psychiatric Clinic
at Slovak University.

Oravec, D.

Rhythmic reaction caused by cytostatics. L. Derc, R. Menkyna, L. Nepelová, and D. Oravec (Slovenská Univ., Bratislava, Czech.). *Bratislavské Listy* 34, 477-84 (1954).—After a single application of chloroalkylamine (0.018 mg./kg.), adrenocorticotropic hormone (250 mg.), and x-irradiation the human organism reacts with periodic activity of 6-day intervals which is manifested by a decrease in leucocytes and excretion of uric acid and 11-oxygenated corticosteroids. L. J. Urbanek

CZECHOSLOVAKIA AND INTERNAL SECURITY - Internal Security
General Information.

Ref. Num : Ref. Num - Riga, No. 1000, D-545
Author : Oravcov, D., P. Lopata, L., Vlasyuk, D., Makyrin, V.
Inst : -----
Title : Paraxypropyl phenol in the therapy of Hyperthyroidism
and hypothyroidism. Card. 1 of 2.
Orig. Pub : Univ. A. Lukashevsky, 1977, No. 2, 12-13.

Abstract : In 2 cases in which hyperthyroidism of the subacute type
was observed, the results of treatment by paraxypropyl phenol (I) were reported. The
(I) excreted, paroxypropylphenol (I) was applied. The
patients received the drug with daily doses of I: 100 mg
and 150 mg. During the treatment, the thyrotoxic symptoms
disappeared, the heart rate, blood pressure and weight
remained normal. It is suggested that I were effective in
the therapy of hyperthyroidism, probably because of its
action on the thyroid. -- V.N. YATSKA

Card 1/1

LAJDA, J.; ORAVEC, D.; SIMKO, S.

On the problem of the thyroid lingual. Contribution to diagnosis
and therapy. Cesk. otolaryng. 12 no. 3:179-184 Je '63.

1. Otolaryngologicka katedra Lek. fak. UK v Bratislave, veduci
doc. MUDr. J. LaJda II interna klinika Lek. fak. UK v Bratislave,
preinosta prof. dr. T. Niederland, DrSc. Vyskumny ustav onkolo-
gicky v Bratislave, riaditel' doc. dr. V. Thurzo.
(THYROID GLAND) (TONGUE NEOPLASMS)

CZECHOSLOVAKIA

OHLAVEC, D; KURLOVA-STUROVA, B

Third Department of Internal Medicine, Faculty of Medicine,
Comenius University (Katedra internej mediciny 3 Lek. fak.
Univerzity Komenskeho), Bratislava - (for both)

Bratislava, Bratislavské lekarske listy, No 1, January 1966,
pp 53-59

"The vegetative nervous system in thyropathies. Part 1; The
reactivity of the vegetative nervous system in thyrotoxicoses."

CRAVEC, J.

The Fezinok Machine-Tractor Station responds to the appeal of the Senec
Machine-Tractor Station. p. 141.

Vol. 6, no. 8, Apr. 1956

SBORNIK RAD A MÉCHANISACI A VLETNÍ FIKACE / MEDIALSTVI A LESNICTVI

czechoslovakia

Source: EAST EUROPEAN LISTS Vol. 5, no. 11 Nov. 1956

Z/042/63/000/001/002/003
E140/E463

AUTHORS: Oravec Július and Virsik Felix, Engineers
TITLE: Pulse method for measuring thyratron ionization time
PERIODICAL: Elektrotechnický časopis, no.1, 1963, 18-25
TEXT: The method consists in applying a pulse of defined voltage levels and of varying duration to the thyratron grid (with thyratron d.c. anode voltage as a parameter). The ionization time is given by the shortest pulse which ignites the thyratron. For an experimental argon-filled thyratron, times of the order of 1 to 7 μ s were measured and compared with values calculated from a simplified theoretical model. Agreement within an order of magnitude was obtained. There are 7 figures.
ASSOCIATION: Katedra teoretickej a experimentálnej elektrotechniky SVŠT, Mýtna 32/e, Bratislava (Department of Theoretical and Experimental Electrical Engineering SVŠT, Mýtna 32/e, Bratislava)
SUBMITTED: September 14, 1962
Card 1/1

ORAVEC, J.

Use of photomultipliers in examining the plasma of electric
discharge in its initial stages and in deionization stages.
El tech cas 14 no.4:236-239 '63.

2/2/11
ACCESSION NR: AR4032164

S/0058/64/000/002/A039/A039

SOURCE: Ref. zh. Fiz., Abs. 2A337

AUTHORS: Dvoretskiy, A. S.; Kazakov, V. A.; Kolesov, I. V.; Ora-vets, Yu.; Sikolenko, V. F.; Skry*1', I. I.; Frolov, N. S.

TITLE: Installation for automatic registration of the coordinates of a particle entering a pellicle stack

CITED SOURCE: Tr. 5-y Nauchno-tekh. konferentsii po yadern. radio+ elektron. T. 4. M., Gosatomizdat, 1963, 15-27

TOPIC TAGS: high energy particle interaction, emulsion technique, electronic particle identification, particle trajectory recording, particle trajectory photography

TRANSLATION: An automatic installation is described, combining the emulsion technique for high-energy particle interactions and the

Card 1/2

ACCESSION NR: AR4032164

electronic method of identifying the particles. The installation can register the coordinates at which the required particles enter the pellicle stack with ± 0.5 mm accuracy. It consists of a spark-counter telescope, a pellicle stack, a recording chamber, and electronic control blocks. The coordinates of the spark that develops along the track of the particle passing through the counters are photographed through an optical unit that produces pictures of two mutually-perpendicular projections of each spark on one frame of motion picture film. High accuracy in the determination of the coordinates is attained by precision construction of the optical and mechanical units of the installation, by selecting the optimum operating conditions of the spark-counter telescope, and by using a triggered-voltage pulse generator with low delay (not more than 0.25 usec). The use of the insulation described yields a substantial gain in the time required to interpret the experimental data. L. I.

DATE ACQ: 31Mar64

SUB CODE: PH, SD

ENCL: 00

Card 2/2

ORAVEC, J. [Oravets, Yu.]; SIKOLENKO, V.F.

Generator of high-power pulses of small length with a steep rise and its use in measuring the mobility of electric charges in gases. Chekhosl fiz zhurnal 14 no. 3:196-202 '64.

1. Ob"yedinenyy institut yadernykh issledovaniy, laboratoriya vysokikh energiy, Dubna, SSSR.

ORAVECZ, Rela

Present state of pre-fabricating central heating systems
Épuletgépészeti 11 n. 2:57-65 Ápr. '62.

ORAVECZ, Bela

Domestic engineering solutions in prototype dwelling houses.
Epuletgepeszeti 12 no.1/2:16-20 Mr '63.

GRAVECZ, Bela

Some words about the technical guidelines relating to the
design of gas-fired installations with a closed combustion
chamber. Epuletgepeszet 12 no.1/2:41-42 Mr '63.

ORAVECZ, Bela

Remark about Imre Szentpaly's article entitled "Designing
and operational problems of the central hot water heating system
in dwelling houses." Epuletgepeszet 12 no.1/2:51 Mr '63.

ORAVECZ, Bela, ZEMAKI Katalin, OROSZ Eszter

Remarks on the development of the Hungarian economy
17 Aug 1976

1. Működési és politikai vállalkozásokat követően:
Fennszerű foglalkozási politika, az ipar és a Vevőszektorral való együttműködés.
2. Petefi szabadság ünnepélyezése, a Szabad Város ünnepelése.
Nagy öntiszteletben.
3. Csepeli Sportuszoda nyitása.

ORAVECZ, Janos

A new crab deposit from the Triassic period in Hung. M. Foldi kozl
92 no.3:324-329 Jl-0 '62.

ORAVECZ, Janos, dr.

Stratigraphic and facies questions of the Upper Triassic formations in the Dunantul Central Mountains. Foldt kozl 93 no.1:63-73 Ja-Mr '63.

ORAVECZ, Janos, dr.

Silurian formations in Hungary. Foldt kozl 94 no.1:3-9
Ja-Mr '64.

ORAVECZ, P.

The tasks of the university stomatology clinics in the introduction and development of the institution of school dentists.
Fogorv. szemle 44 no.6:170-172 June 1951. (CIML 21:1)

1. Prof. Doctor. 2. Stomatological Clinic, Pecs Medical University.

ORAVECZ, Pal, dr., egyet. tanar.

Studies on dental focal infection in school children in the
village Pecs with special reference to deciduous teeth. Fogorv.
szemle 47 no.8:242-251 Aug. 54.

1. Kozlemeny a pacsi orvostudomanyi egyetem stomatogiai klinikajarol.
(Besszamolo a Klinika tudomanyos munkakoszasegt - a Magyar Tudomanyos
Akademia tamogatasaval, 1952-ben vegzett - vizsgalatainak
eredmeyerol.)

(FOCAL INFECTION,
dent.,deciduous teeth, in child., statist. in Hungary)
(TEETH, DECIDUOUS, diseases,
focal infect. in child., statist. in Hungary)

FINDO, B.; ORAVEC, D.

Treatment of taeniasis. Slovensky lekar 12 no.9-10:491-493 Sept-Oct
50. (CLML 20:5)

1. Of the First Internal Clinic of Slovak University, Bratislava.

ORAVETS, Y., FROLOV, N. S., KAZAYOV, V. A., CHIRL, I. I., DVORITSKII, A. S.
SERERYAKOV, R. A., KOLESOV, I. V., AND SIKOLIMKO, V. F.

"Choice of Coordinates in Regard to the Entrance of Particles into an
Emulsion Chamber (STsU-1),

Joint Institute of Nuclear Research, Dubna, USSR

report submitted for the IAEA conf. on Nuclear Electronics, Belgrade, Yugoslavia
15-20 May 1981

ORAVETZ, J.

On the problem of the systolic murmur in mitral stenosis.
Bratisl. lek. listy 45 no. 5:30--313 15 Mr '65

1. II. chirurgicka klinika Lekarske fakulty Univerzity Fom
menskeho v Bratislave (veduci: akademik K. Siska).

NAVSKY, EDGARD

Aneži demokratikus országok földrajza. (Vys.1.) Bratislava, Slovenske pedagogicke nakladatelstvo, 1975. 36. p. Vysoškalske země mapy. (Geography of the people's democratic countries; a university textbook) in Hungarian. Ts. from the Slovak. 1st. ed., maps, bibl., tables

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0012381

DRÁVSKÝ, J.; VAVŘÍČEK, J.; LINDNER, M.

"Television transferred to 'Silesia,'" p. 5.

ASPIRACIÓN ČESKÉ. Praha, Československá, Vol. 3, No. 11, Nov., 1955

Monthly List of East European Assessments (EAI), U.S., Vol. 1, No. 1, October, 1949
"Inclas"

VATHY, Istvan, dr.; RIBARI, Otto, dr; ORAWETZ, Otto, dr.

Clinical aspects and treatment of benign tumors of the nasal sinuses based on 15-years' experience. Orv. hetil. 105 no.21:
968-971 24 My'64

1. Budapesti Orvostudomanyi Egyetem, Ful-orr-gegéklinika.



ORAYEV, N.

Geographical characteristics of cotton growing in Chardzhou
Province. Vest. LGU 17 no.12:75-86 '62. (MIRA 15:7)
(Chardzhou Province--Cotton growing)

ORAYEV, N.

Geographical characteristics of sericulture in Chardzhou
Province. Uch.zap.Turk.gos.un. no.24:91-98 '63.

(MIA 18:11)

ORAYEVSKAYA, G.A.

[Reducing expenses of machine-tractor stations for agricultural production] Snizhenie zatrat MTS na proizvodstvo sel'skokhozaisstvennoi produktsii. [Khar'kov] Kar'kovskoe obl. izd-vo, 1957. 158 p.
(Ukraine--Machine-tractor stations) (MLRA 10:9)

L 35886-66 FBD/EWT(1)/EEC(k)-2/T/EWF(k) IJL(c) WG
ACC NR: AP6024516

SOURCE CODE: UR/0386/66/004/002/0061/0062

AUTHOR: Basov, N. G.; Orayevskiy, A. I.; and Shcheglov, V. A.

ORG: Physics Institute im. P. N. Lebedev, Academy of Sciences SSSR (Fizicheskiy institut Akademii nauk SSSR)

TITLE: Beam laser for the infrared band 15

SOURCE: Zh eksper i teor fiz. Pis'ma v redaktsiyu. Prilozheniya, v. 4, no. 2, 1966, 61-62

TOPIC TAGS: molecular generator, ir quantum generator, optic transition, laser pumping

ABSTRACT: The authors show that atomic- or molecular-beam masers, the development of which has hitherto been confined to the radio band, are also feasible for the infrared band and discuss briefly the possible molecular transitions that can be used to construct an ir laser with thermal pumping. Such a laser is based on a very simple idea: a highly heated beam of molecules is allowed to escape to a vacuum in which the equilibrium radiation is much smaller than $(E_\beta - E_\alpha)/k$ (E_β and E_α are two molecular levels, $E_\beta > E_\alpha$, whose radiative decay times satisfy the relation $\tau_\beta > \tau_\alpha$). Spontaneous emission soon depletes the α level and a state with population inversion can be produced for the $\beta \rightarrow \alpha$ transition. The necessary condition for the occurrence of population inversion between the levels β and α is $\tau_\beta > (1 + \tau_{\beta\alpha}/\tau_\beta)\tau_\alpha$. The most convenient wavelength range for the proposed method is 3 - 20 μ . The suitable transitions for the CO_2 molecule are illustrated. Similar transitions can be obtained for N_2O and HCN. It is

Card 1/2

L 35886-66

ACC NR: AP6024516

also possible to excite the molecules not only by heating but also by electric discharge, as in a gas laser. Orig. art. has: 1 figure.

[02]

SUB CODE: 20/
17/ SUBM DATE: 19May66/ OTH REF: 002/ ATD PRESS: 5037

Card 2/2 100

L 41812-65 EWT(l)/EWF(m)/EWA(d)/EPR/FCS(k)/ENA(h)/EWA(c) Pd-1/P1-4 WW
ACCESSION NR: AP5010511 UR/0056/65/048/004/1150/1154 43
44

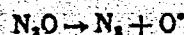
AUTHOR: Orayevskiy, A. N.

TITLE: Obtaining population inversion by thermal dissociation of molecules in a shock wave

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 48, no. 4, 1965, 1150-1154

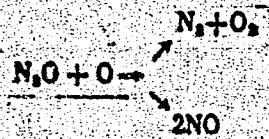
TOPIC TAGS: gas laser, population inversion, molecular dissociation, thermal dissociation, shock wave, N₂O gas

ABSTRACT: In an earlier work (ZhETF, 45, 1963, 177) the author postulated that population inversion can be established by thermal dissociation of a number of molecules. In the present work, a theoretical analysis is made of the conditions for population inversion in N₂O gas ($N \geq 10^{18} \text{ cm}^{-3}$) through excitation by a shock wave (-3·10⁵ cm/sec). The following chemical reactions were shown to occur during the propagation of a shock wave in N₂O:



Core 1/B

L 41812-65
ACCESSION NR: AP5010511



where M is any molecule and $O^* = O(^1D)$. The kinetics of the above reactions, which determine the population of energy levels of the active substance, is discussed. Orig. art. has: 2 figures and 19 formulas.
[YK]

ASSOCIATION: Fizicheskiy institut im. P. N. Lebedeva Akademii nauk SSSR (Physics Institute, Academy of Sciences, SSSR).

Can. 2/3

L 41812-65
ACCESSION NR: AF5010511
SUBMITTED: 29 Oct 64
NO REF Sov: 003

ENCL: 00 SUB CODE: ME, EC
OTHER: 003 ATD PRESS: 3235

cc
Cordially yours,

L 48294-65 EVA(k)/FSD/EMG(x)/DT(1)/EFC(k)-2/EG(t)/T/EFC(l)-2/BMP(k)/EVA(m)-2/
EVA(s)

ACCESSION NR: AP5012614

UR/0051/65/018/005/0858/0865

61

AUTHOR: Belenov, E. M.; Orayevskiy, A. N.

TITLE: Kinetic processes in a gas laser

B
25

SOURCE: Optika i spektroskopiya, v. 18, no. 5, 1965, 858-865

TOPIC TAGS: gas laser, gas laser kinetic process, neon helium laser, laser output power

ABSTRACT: An investigation is made of the influence of various parameters of the active substance on the output power of a neon-helium laser. The calculations were made for a specific transition of $2p^5 4s^1 P_1 \rightarrow 2p^5 3p^3 P_2$ with $\lambda = 1.152 \mu$, although they can be applied to generation at other wavelengths. Proposals for ways of increasing the output power of a neon-helium laser are as follows: 1) addition of a buffer gas, which enhances the decay of metastables; 2) increase in the working gas temperature, which increases the energy of electrons; 3) pulsed excitation, which results in an advantageous population of the upper working level during the luminescence period; 4) increase in the resonator length, which results in more modes in the Doppler line width; 5) increase in the length of the discharge tube, which leads to a proportional rise in the output power; and 6) reduction in the characteristic size Λ of the discharge tube while maintaining or increasing

Card 1/2

L 48294-65

ACCESSION NR: AP501261^b

the volume of the working gas (the power generated by a volume unit will increase as Λ^{-2}). These proposals can be implemented easily for a discharge tube with a rectangular cross-section. In the event that one side of the cross-section is much larger than the other, the characteristic size of the discharge tube will be determined by the smaller side. Here, as in the case of a circular cross-section tube, the smaller side will have an optimum value h_{opt} . However, in this case h_{opt} will be determined not by the changes of the generated power with the change in the working gas volume but by the rise of diffraction losses with decreased h . [JA]

Orig. art. has: 2 figures and 8 formulas.

ASSOCIATION: none

SUBMITTED: 02Mar64

NO. REF. BOV: 017

ENCL: 00

OTHER: 008

SUB CODE: EC

ATD PRESS: 3250

Card 2/2

BAS 7, N.I.; MATT, AKA FLAVIO, T., etc.

SOME EPIX TEL IN LATE 1970'S. 1978-79
USING MASTERS AND VACUUM MASTERS. 1980-81
1000.

1. PRELIMINARY INVESTIGATION

O AYE

USRI Physical Chemistry - Molecule. Chemical Bond.

B-4

Abs Jour : Referat Zhur - Khimiya, No 6, 25 March 1957, 1818c

Author : Basov, I.G., Gravyskiy, A.N., and Svilizinskiy, K.K.
Title : Theory of Superfine Structure of Rotational Spectra of
Molecules Conditioned by the Electrical 2⁴-pole Moment
of Nucleus.

Orig Pub : Optika i spektroskopiya, 1956, 1, No 3, 285-289

Abstract : The value of energy of 2⁴-pole interaction of nucleus
with the field of a molecule can have the order of 1khc
which makes it possible to measure 2⁴-pole moment of nu-
cleus by radiospectroscopic method. In this work the
theory of superfine structure of rotational spectra of
linear molecules and molecules of the type of symmetrical
top is developed. The structure is conditioned by the
electrical 2⁴-pole moment of nucleus. By resolving into
a series, by powers of r_a (r_a is a coordinate of the char-
ge), the potential energy of a system of charges, which

Card 1/3

- 32 -

USSR/Physical Chemistry - Molecule. Chemical Bond.

B-4

Abs Jour : Referat Zhur - Khimya, No 6, 25 March 1957, 18180

is located in the outer field, a classical tensor of the 2^4 -pole moment is built. The tensor operator of 2^4 -pole moment of nucleus eDikim is built by analogy with the classical tensor from the projections of the spin of the nuclei and the symmetry of the classical tensor is taken into consideration. Moreover, the tensor operator is symmetrized because of uncommutative character of projections of the spin of nucleus. Hamiltonian of 2^4 -pole interaction is equal:

$$\hat{H} = (e/4\pi^2) D_{ijkl} (\partial^4 \varphi(0)/\partial x_i \partial x_j \partial x_k \partial x_l)$$

In case of an axial symmetry of the field of the molecule

$$\hat{H} = (c/3.64) D_{3333} \partial^4 \varphi(0)/\partial x^4$$

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- 33 -

USSR/Physical Chemistry - Molecular Chemical Bond.

R-4

Abs Jour : Referat Zhur - Khimiya, No 6, 25 March 1957, 18180

where \hat{z} is the axis of symmetry of the molecule.

A computation of E_{3333}^{3333} is carried out in a system of co-ordinates rigidly bound with the molecule, and diagonal matrix elements of the hamiltonian of 2^4 -pole interaction in terms of I,J,K,F are computed ($F \equiv \vec{I} + \vec{J}$).

Card 3/3

- 34 -

0649C

SOV/141-58-4-6/26

AUTHORS: Basov, N.G. and Orayevskiy, A.N.

TITLE: The Possibilities of Making a Sealed Maser Using
ND₃, NH₂D and NHD₂ Molecules (O vozmozhnosti
sozdaniya otpayannogo molekulyarnogo generatora s
ispol'zovaniyem molekul ND₃, NH₂D i NHD₂)

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Radiofizika,
1958, Nr 4, pp 63-68 (USSR)

ABSTRACT: The possibility is considered of preparing molecules
in active state in three energy levels (Fig 1) by
using auxiliary radiation. The energies of the three
levels are given in Eq (1). The theory and design are
given of an oscillator using deuterated ammonia.
Under conditions of thermodynamic equilibrium, the
number of molecules N₃ in level three is greater than
the number of molecules in N₂ and N₁ in levels two and
one, since in this case the number of molecules in a

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06490

SOV/141-58-4-6/26

The Possibilities of Making a Sealed Maser Using ND₃, NH₂D and NHD₂ Molecules

level is determined by the Boltzmann factor. An auxiliary radiation whose frequency is given by Eq (2) excites the molecules from level three into level one creating a surplus of molecules in level one compared with those in level two (see Fig 1a) or in level two compared with level three (see Fig 1b). These respective transitions 1-2 and 2-3 are used to excite a resonator whose frequency is given by Eq (3) for the case in Fig 1a or Eq (4) for the case of Fig 1b. The greatest number of active molecules is obtained under conditions of saturation and the actual numbers are given for the two cases by Eq (5). If the gas is illuminated by monochromatic radiation the saturation conditions must satisfy Eq (6). The minimum width of the spectral line from the maser is given by the Doppler width of the line in the basic transition. If the gas pressure is too high the line increases in width and if the pressure is too low then the number of active molecules falls off. The optimum pressure is

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06490

SOV/141-58-4-6/26

The Possibilities of Making a Sealed Maser Using ND₃, NH₂D and
NHD₂ Molecules

given by Eq (7). If a monochromatic auxiliary radiation is used however, considerable line broadening occurs; this may be avoided by using as auxiliary radiation a group of frequencies whose spacing is of the order of the basic Doppler width, in this case the saturation condition is given by Eq (8). Line broadening still occurs but it is now significantly less. The energy stored in the resonator is given by Eq (9) and, depending on the quality factor of the resonator, the auxiliary power required is given by Eq (10). This last amount is considerably less than that required when using monochromatic illumination. The best type of resonator to use is a cylindrical one supporting a mode E001. The conditions for self-excitation of a maser depend neither on the type of oscillations supported nor on the pressure and can be written as Eq (11). The rotational transition for ND₃ has a frequency of 3×10^{11} c/s and higher. The frequency

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06490

SOV/141-58-4-6/26

The Possibilities of Making a Sealed Maser Using ND₃, NH₂D and
NHD₂ Molecules

increases with the quantum number J. Power is very difficult to obtain at these frequencies and in practice low quantum numbers are therefore to be preferred. It is therefore proposed to use as the low-frequency transition 1⁻ - 2⁻ and for the fundamental transition 1⁺ - 1⁻. The leading particulars of the oscillator are calculated to be as follows: fundamental frequency, 1598×10 Mc/s; auxiliary frequency, 6.2×10^{11} c/s; Doppler width of the line at fundamental frequency 2.2×10^3 c/s; Doppler width at the auxiliary frequency 8.5×10^5 c/s; resonator quality necessary to maintain oscillations 3×10^3 ; auxiliary power 4×10^{-5} watts; number of active molecules 6×10^{15} molecules per second; power output 10^{-10} watts. It is reckoned that under practical conditions the stability of oscillation would be approximately one part in 10^8 . The fundamental difficulty in making an ND₃ maser is the difficulty of obtaining sufficient power at a wavelength of 0.5 mm.

Card 4/5

06490

SOV/141-58-4-6/26

The Possibilities of Making a Sealed Maser Using ND₃, NH₂D and
NHD₂ Molecules

Molecules of partially deuterated ammonia have an asymmetrical spin and therefore have a richer spectrum. Table 1 shows values of the frequencies of the basic and auxiliary radiations for molecules NH₂D and NHD₂ and also the intensities of the lines. Table 2 gives the parameters of masers using the lines given in Table 1. There are 2 figures and 2 tables and 13 references, 7 of which are Soviet.

ASSOCIATION: Fizicheskiy institut imeni P.N. Lebedeva AN SSSR
(Physics Institute imeni P.N. Lebedev, AS USSR)

SUBMITTED: 10th November 1957

Card 5/5

ט' ט'

INTERVIEWER: I am going to ask you some questions about your life, and I would like you to answer them as truthfully as you can.

The author has at a recent time been engaged in the development of a new type of electron gun for use in a cathode ray tube. The gun is designed to produce a beam of electrons having a diameter of about 0.001 in. at the cathode, and a current density of about 100 amperes per square centimeter at the anode. The gun is mounted in a vacuum chamber, and the electron beam is focused by a magnetic field produced by a coil wound around the gun. The gun is supplied with a high voltage of about 10,000 volts, and the current density is controlled by varying the voltage. The gun is designed to operate at a frequency of 100 megacycles per second. The gun is mounted in a vacuum chamber, and the electron beam is focused by a magnetic field produced by a coil wound around the gun. The gun is supplied with a high voltage of about 10,000 volts, and the current density is controlled by varying the voltage. The gun is designed to operate at a frequency of 100 megacycles per second.

卷之二

Quantum Electronics Division

700-10-1010

During the last few years, the work performed at the Research Institute of Solid State Physics has been concentrated on the development of solid-state lasers and on work connected with the theory of M. Ioffe's laser. In their research, the Institute has applied the physical principles of stimulated emission and stimulated absorption to different types of lasers. In particular, they have developed a new type of laser, the so-called "laser with a rotating cavity," which is based on the principle of stimulated emission. This type of laser has a number of advantages over other lasers, such as the fact that it can operate at higher frequencies and with higher power. The Institute has also developed a new type of laser, the so-called "laser with a rotating cavity," which is based on the principle of stimulated emission. This type of laser has a number of advantages over other lasers, such as the fact that it can operate at higher frequencies and with higher power.

Chart 12

147, *W. A. B. Coolidge*, *On the History of the American Revolution*, Boston, 1895.

THE STATION IS LOCATED AT AN ELEVATION OF SEVEN HUNDRED FEET.

卷之三

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0012381

05480

SOV/141-2-2-5/21

AUTHORS: Bunkin, F.V. and Orayevskiy, A.N.

TITLE: Spontaneous Radiation of a Molecule Inside a Resonator

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Radiofizika, 1959, Vol 2, Nr 2, pp 181 - 186 (USSR)

ABSTRACT: The probability W_{cn} of the spontaneous radiation of a molecule, placed in a resonator, during its transition from an excited level E_2 to a level E_1 (where $E_2 > E_1$) should be different from the probability W_{cn}^0 which corresponds to the radiation of the molecule in free space. In a number of works (Refs 1-3) the probability W_{cn} is determined by multiplying the probability W_{cn}^0 by a factor f which is equal to the ratio of the number of the field oscillators in a unit spectrum interval in a unit resonator volume to the corresponding number in free space. It is found, however, that such a formula is inaccurate if the condition given by Eq (1) is not fulfilled; in Eq (1), ΔE denotes the width of the spectral levels and Q is the quality factor of the

Card1/5