

100STI. K. inshener.

Manufacturing fibrolite in Czechoslovakia. Stroi.mat., 1zd.1  
konstr. 2 no.9:37-38 S '56. (MLRA 9:11)  
(Czechoslovakia--Insulating materials)

IOOSTI, Kh. (Joosti, H.)

Industrial management under new conditions. Stroi.mat.3 no.9:32-34  
S '57. (MIRA 10:10)

1. Nachal'nik Upravleniya promyshlennosti stroitel'nykh materialov  
Soveta narodnogo khozyaystva Estonskoy SSR.  
(Estonia--Building materials industry)

IOPA, I.S.; DAN'KOV, I.A.; MANNOV, G.M.

Using Academician V.P. Filatov's tissue preparations on Ryazan Province livestock farms. Veterinariia 34 no.10:25-29 0 '57.  
(MLRA 10:11)

1. Zamstitel' nachal'nika oblastnogo upravleniya sel'skogo khozyaystva Ryazanskoj oblasti (for Iopa). 2. Nachal'nik veterinarnogo otdela oblastnogo upravleniya sel'skogo khozyaystva Ryazanskoj oblasti (for Dan'kov). 3. Direktor Ryazanskoj oblastnoy veterinarnoy bakteriologicheskoy laboratorii (for Mannov).

(Tissue extracts)

(Ryazan Province--Stock and stock breeding)

IOPEK, F.

Use of hydraulic filling in mines of the Polish People's Republic.  
Ugol' 31 no.10:38-46 0 '56. (MLRA 9:11)

1. Zamestitel' Ministra ugol'noy promyshlennosti Pol'skoy Narodnoy  
Respubliki.  
(Poland--Hydraulic mining)

IOPUKHINA, Ye.M., kand.tekhn.nauk; KRASNYI, V., inzh.

Study of an asynchronous capacitor slave motor by means of mathematical simulation. Elektrotehnika 36 no.2:1-5 F '65.  
(MIRA 18:4)

BLOKH, G.S.; IORAMASHVILI, I.N.

Laboratory methods of preparing asbestos cement samples. Trudy  
NIIAsbestsementa no.19:70-79 '65. (MIRA 18:9)

IORDACHE, C.

Effect of certain quaternary ammonium salts on the behavior of a  
frog's right abdominal muscle under acetylcholine. p. 1181.  
COMUNICARILE. Bucuresti. Vol. 5, no. 8, Aug. 1955.

SOURCE: East European Accessions List (EEAL) Library of Congress  
Vol. 5, No. 7, July 1956.

CATRENA, I.; CHELI, H. D.; IORDACHE, Corina; NITU, Cornelia

Biochemical and physiological studies on the drying phenomenon  
of oaks. Studii cerc biochimie 5 no.1:25-37 '62.

1. Institutul de cercetari forestiere si Institutul de biochimie  
al Academiei R.P.R., Bucuresti.



IORDACHE Corina

From the activities of the Institute of Biochemistry, Rumanian Academy. Studii cerc biochimie 5 no.1:161-163 '62.

1. Institutul de biochimie al Academiei R. P. R.

\*

MACOVSCI, E., acad.; IORDACHE, Corina

Isometric coefficients and the relations between effort and muscular phosphagen. *Studii cerc biochimie* 6 no.2:181-199 '63.

1. Institutul de biochimie al Academiei R.P.R.

X

SCHELL, H.D.; IORDACHE, C.; BATCU, A.; CRISTEA, E.; MOTET-GRICORAS, D.

Medical biochemistry. Studii cerc biochimie 5 no.3:467-473 '62.

IODACHE, Corina

The visit of Academician A.V.Palladin. Studii cerc biochimie 6  
no.2:313-314 '63.

1. Cercetator principal la Institutul de biochimie al Academiei  
R.P.R.

✎

COTARIU, D.; SCHELL, H.D.; IORDACHE, G.; LUTA-MOLDOVEANU, N.; VASU, S.;  
ARNET, L.; MOTET-GRIGORAS, D.

Medical biochemistry; reviews. Studii cerc biochimie 6 no.2:  
304-310 '63.

COTARIU, D.; IORDACHE, C.; FURNICA, M.; BATCU, A.; FILIPESCU, H.;  
MOTET-GRIGORAS, D.

General problems. Research methods. Studii cerc biochimie 6  
no.3:425-428 '63.



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Medical biochemistry. Studii cerc biochimie 6 no.3:440-445 '63.

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MANESCU, M.; GRIGORESCU, C.; COTARIU, D.; SCHELL, H. D.; IOEDACHE, C.;  
FURNICA, M.; BATCU, A.; FILIPESCU, H.

Animal biochemistry. Studii cerc biochimie 6 no.3:433-440  
'63.



IODACHE, Corina

Role of excitations and mechanical effort in the decomposition of phosphagen in the muscles in different stages of excitability. Studii cerc biochimie 7 no.2:195-203 '64.

1. Institute of Biochemistry, Rumanian Academy, Bucharest. Submitted February 18, 1964.

ION, Nita, ing.; POTOCEANU, I., ing.; IORDACHE, C., ing.; STANTIEV, I.;  
ANDREI, M., ing.; POPESCU, I.

Reducing cost price, an important task in the siderurgical industry.  
Probleme econ 17 no.2:147-151 F '64.

1. Director tehnic conceptie, Combinatul siderurbic Hunedoara (for Ion).
2. Director general, Combinatul siderurgic Resita (for Potoccean).
3. Director, Uzina de tevi Roman (for Iordache).
4. Director, Industria sirmei-Cimpia Turzii (for Stanatiev).
5. Seful Serviciului Planificare, uzina Ciocanul-Nadrag (for Popescu).

CERCHEZ, V., dr.; BRUDA, N., ing.; IORDACHE, Gh., ing.

Improving the quality of oils by means of additives. Petrol si  
gase 14 no.1:37-45 Ja '63.

IORDACHE, Gh., ing.

Detergent additives for lubricating oils Petrol si gaze 15  
no.1:30-35 Ja '64

L 31730-66 EWP(t)/ETI IJP(c) JD

ACC NR: AP6021195

SOURCE CODE: RU/0017/65/000/008/0410/0411

AUTHOR: Grecov, D. (Engineer; Candidate in technical sciences); Iordache, I.  
(Engineer)

49  
B

ORG: Institute of Power, Academy of the Socialist Republic of Rumania (Institutul de Energetica, al Academiei R.S. Romania)

TITLE: Efficiency of the self-carburization of natural gas flames in Siemens-Martin furnaces

SOURCE: Metalurgia, no. 8, 1965, 410-414

TOPIC TAGS: metallurgic furnace, carburization, methane

ABSTRACT: By studying the degree of blackness of self-carburized methane gas flames, the authors found that self-carburization of methane gas in open-hearth furnaces becomes effective starting at a preheating temperature of 700 to 800 degrees centigrade, and increases in efficiency with higher temperatures and larger radiant layers. Orig. art. has: 5 figures and 12 formulas. [JPRS]

SUB CODE: 13 / SUM DATE: none / ORIG REF: 002 / OTH REF: 001  
SOV REF: 004

Card 1/1/88

UDC: 669.183.212.218

Iordache, I., Biner, M.

An analysis of the specific consumption of electric power at the quasi-homogeneous production. In Russian, p. 281.

REVUE D'ELECTROTECHNIQUE ET D'ENERGETIQUE. JOURNAL OF ELECTROTECHNICS AND ENERGETICS. (Academia Republicii Populare Romine. Institutul de Energetica) Bucuresti, Rumania Vol. 2, no. 2, 1957

Monthly List of East European Accessions (EEAI) LC, Vol. 8, no. 9, Sept. 1959

Uncl.

MUNTEANU, Augustin; IORDACHE, Ion

Continuous improvement of the technical and material supplying.  
Probleme econ 16 no.2:156-157 F '63.

1. Director, Fabrica de conserve de legume si fructe "11 Iunie"-Dej (for Munteanu).
2. Director, Intrepinderea Industrială de Stat "Prutul"-Galati (for Iordache).

GRECOV, D.; IORDACHE, I.; GUTU, E.

Study on the gas fuel and air mixing processes in industrial  
burners. Rev electrotechm energet 9 no.1:97-110 '64



GREKOV, D. [Grecov, D.]; ~~IORDAKE~~, I. [Iordache, I.]

Radiation of natural gas lighting flames. Rev electrotechn  
energet 9 no.3:415-426 '64

IORDACHE, Mihail, correspondent

To the steel mills. Constr Buc 14 no. 674: 1 8 December  
1962.

MOISE, D., corespondent; SANDA, Constantin; RADU, Eugenia, corespondenta;  
IORDACHE, Mihail, corespondent; OROS, Maria, tehniciana

Innovation, an inexhaustible reserve. Constr Buc 16 no.736:3  
15 P\*64.

1. Din postul de corespondenti voluntari (for Oros)

IORDACHE, Mihail, corespondent

Outfit of good quality. Constr Buc 16 no.744:1 11 April '64.

LOGOTETI, Victoria, corespondenta; IORDACHE, Mihail, tehnician;  
HOSSU, Teodor, corespondent; SANDA, Constantin

In short. Constr Buc 16 no. 749:3 16 May '64.

IODACHE, Mihail, correspondent

Constructions of good quality. Constr. Buc. 16:1 19 D '64.

PANTU, I., ing.; IORDACHE, R., ing.; PINTESCU, C., ing.

Captation of water for the Chemical Fertilizer Trust, Turnu  
Magurele. Rev constr si mat constr 16 no.9:484-488 S '64.

ICORDACHE, S.

Results of the geophysical measurements applied in the prospecting and exploring of metal-liferous ores. p. 406.

REVISTA MINELOR. (Ministerul Minelor, Ministerul Industriei Petrolului si Chimiei, Directia Exploatarilor Miniere si Asociatia Stiintifica a Inginerilor si Tehnicienilor din Romania) Bucuresti, Rumania. Vol. 10, no. 10, Oct. 1959

Monthly list of East European Accessions (EEAI) LC Vol. 9, no. 2, Feb. 1960

Uncl.



IORDACHE, Sterian, ing.

Maintaining buildings and constructions in good shape.  
Rev callor fer ll no. 12: 695-697 D '63.

BELU, Gh., candidat in stiinte economice; IODACHE, V.

"Course in theoretical statistics" by M.Biji, D.Hasigan, L.Pintilie,  
I.Stoichita, L.Tovissi. Reviewed by Gh. Belu, V.Iordache. Probleme  
econ 16 no.12:132-137 D '63.

RUMANIA

IORDACHEANU, Ligia, Dr

Infant and Orthopedic Surgical Clinic of Iasi (Clinica de Chirurgie Infantila  
si Ortopedie)

Bucharest, Viata Medicala, No 10, 15 May 1963, pp 709-713

"Blood Transfusion as a Causative Factor of Malaria in its Period of  
Extermination."

(1)

IORDACHESCU, C

RUMANIA / Cultivated Plants. Potatoes, Vegetables, Melons.

M-4

Abs Jour : Ref Zhur - Biologiya, No 13, 1958, No. 58609

Author : Bunescu, D.; Voinea, M.; Iordachescu, C.

Inst : Not given

Title : Contribution to the Division Into Districts of Cabbage Growing Areas in RPR

Orig Pub : An Inst. cercetari agron., 1957, 24, No 5, 379-394

Abstract : The results of testing white head cabbage in rayons of Rumania in 1950 - 1954 are given in this paper. A description of biological and economic characteristics of varieties and recommendations on the division in the districts of early, medium ripe and late varieties are given.

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IORDACHESCU, C

"APPROVED FOR RELEASE: Thursday, July 27, 2000

CIA-RDP86-00513R0005

720

Development of vegetable growing on collective farms. Problems  
econ 16 no.9:57-71 8. '63.

ENESCU, I., acad.; NEGOITA, C.; NICULESCU, Paula; IORDACHESCU, C.; PINTILIE, St.

Electrocardiographic alterations in the course of attempts at reducing  
and after reduction of atrial fibrillation by quinidine. Rumanian M  
Rev. no.3:14-18 J1-S '60.

(AURICULAR FIBRILLATION therapy) (QUINIDINE therapy)  
(ELECTROCARDIOGRAPHY)

IORDACHESCU, D.

Observations relative to certain parasitic nematodes in our domestic birds. In French. p. 245

Bucharest. Muzeul National de Istorie Naturala "Grigore Antipa."  
TRAVAUX. Bucuresti, Rumania. Vol. 1, 1957

Monthly list of East European Accessions (EEAI) LC Vol 8, No. 6, June 1959  
Uncl.

IORDACHESCU, F.

" Plopil negri hibrizi (zisi de Canada) cunoasterea, cultura si protectia lor (Knowledge, Culture and Protection of So-Called Canadian Hybridized Black Poplars) by A. Beldie and others; a book review. p. 431. (REVISTA PADURILOR, Vol. 69, no. 9, Sept. 1954. Bucuresti, Rumania.)

SO: Monthly List of East European Accessions, (EEAL), IC. Vol. 4, No. 5, May 1955, Uncl.

IODACHESCU, F.

"Raionarea transferului materialelor de impadurire (Regional Transfer of Afforestation Material) by S. Pascovschi and others; a book review. p. 569. (REVISTA PADURILOR, Vol. 69, no. 12, Dec. 1954. Bucuresti, Rumania.)

SO: Monthly List of East European Accessions, (EEAL), LC. Vol. 4, No. 5, May 1955, Uncl.



IORDACHESCU, F.

"Cultura speciilor lemnoase exotice (Culture of Exotic Ligneous Plants) by S. Pascovschi and others; a book review. p. 569. (REVISTA PADURILOR, Vol. 69, no. 12, Dec. 1954. Bucuresti, Rumania.)

SO: Monthly List of East European Accessions, (EEAL), IC. Vol. 4, No. 5, May 1955. Uncl..

IORDACHESCU, F.

"Specii, scheme si metode indicate pentru impadurirea terenurilor degradate din cotul Carpatilor si sudul Moldovei (Species, Schemes, and Methods Indicated for Afforestation of Degraded Terrain in the Environs of the Carpathians and Southern Moldavia) by E. Costin and others; a book review. p. 570. (REVISTA PADURILOR, Vol. 69, no. 12, Dec. 1954. Bucuresti, Rumania.)

SO: Monthly List of East European Accessions, (EEAL), IC. Vol. 4, No. 5, May 1955, Uncl.

IORDACHESCU, F.

"C. Damaceanu and S. Purcelean's *Cultura speciilor industriale: Scumpie si otetar* (Culture of Industrial Plants: Sumac and the Vinegar Tree); a book review, p. 570. (REVISTA PADURILOR, Vol. 69, no. 12, Dec. 1954. Bucuresti, Rumania.)

SO: Monthly List of East European Accessions, (EEAL), IC.  
Vol. 4, No. 5, May 1955, Uncl.

IORDACHESCU , F.

"D. Chirita's Ameliorarea si lucrurile solului in terenurile destinate culturilor forestiere, din cadrul complexului Docuceav-Kosticev-Viliams, din stepa Dobrogei Centrale (Amelioration and Cultivation of Soil in Lands Destined for Forestry Culture in the Cadre of the Docucaev-Kosticev-Viliams Complex); a book review, P. 571. (REVISTA PADURILOR, Vol. 69, no. 12, Dec. 1954. Bucuresti, Rumania.)

SO: Monthly List of East European Accessions, (EEAL), IC.  
Vol. 4, No. 5, May 1955, Uncl.

IORDACHESCU, F.

Let us regenerate and protect forests of our fatherland. p. 201.

REVISTA PADURILOR. (Asociatia Stiintifica a Inginerilor si Technicienilor din  
Romina si al Ministerului Agriculturii si Silviculturii) Bucuresti. Vol. 71,  
no. 4, Apr. 1956.

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

IONESCU, FL.

3

**SURNAME, Given Names**

**Country:** Rumania

**Academic Degrees:** -not given-

**Affiliation:** -not given-

**Source:** Bucharest, Comunicarile Academiei Republicii Populare Romine,  
Vol XI, No 12, 1961, pp 1515-1520.

**Data:** "Magnetometric Data Concerning the Genesis of Thermomineral Waters  
at Baile-Herculane."

**Authors:**

PAPIU, V. Corvin

ROMANESCU, D.

IONESCU, Fl.

IORDACHESCU, Grigore, ing.; LACHMAN, Iuliu, tehnician

Device for hoisting the shaking ensemble of the flotation cells.  
Rev min 14 no.3:138-139 Mr '63.

RUMANIA

TARCOVEANU, Gh., Dr, Col, and IORDACHESCU, I., Dr, Maj [affiliation not given]

"Considerations on the Prevention of Intra-Hospital Infections."

Bucharest, Revista Sanitara Militara, Vol 62, No 5, Sep-Oct 66, pp 877-881.

Abstract: On the basis of bacteriologic studies involving septic and aseptic operating rooms, dressing rooms and patients, as well as a detailed investigation of specific cases of infective complications acquired in the course of hospitalization (2 case histories are presented), the authors evolved some administrative measures aimed at the prevention of such infections. The measures relate to administration of the hospital generally and to the disinfection of patients and doctors.

Includes 4 references, of which 3 Rumanian and one English-language. -- Manuscript submitted 6 December 1965.

IORDACHESCU, J.

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E-2

CIA-RDP86-00513R0005

720

Country : Analytical Chemistry.

Abb. Jour. : Ref. Zhur - Khim., No 7, 1959

23003

Author : Trandafirescu, E.; Iordachescu, J.

Institut. : On the Mechanism of Some Redox Reactions. II.  
Title : Titrimetric Determination of Copper and Zinc without Their Previous Separation.

Orig Pub. : Farmacia (Romin.), 1958, 6, No 1, 37-42

Abstract : Description of a method of determining Cu and Zn in alloys and ores, based on iodometric titration, in a neutral or acetic acid medium, first of Cu<sup>2+</sup>, and then (after addition of K<sub>3</sub>Fe(CN)<sub>6</sub> and K<sub>2</sub>SO<sub>4</sub>) of Zn<sup>2+</sup>, in accordance with the redox reaction: 2K<sub>3</sub>Fe(CN)<sub>6</sub> + 3ZnSO<sub>4</sub> + 2KI → I<sub>2</sub> + 3K<sub>2</sub>SO<sub>4</sub> + Zn<sub>3</sub>K<sub>2</sub>[Fe(CN)<sub>6</sub>]<sub>2</sub>. In the presence of K<sub>2</sub>SO<sub>4</sub> solubility of Zn<sub>3</sub>K<sub>2</sub>[Fe(CN)<sub>6</sub>]<sub>2</sub> is decreased, the reaction is shifted to the right, and reduction of K<sub>3</sub>Fe(CN)<sub>6</sub> takes place to a complete conversion of Zn<sup>2+</sup> to the complex compound. The presence in the solution of precipitates of CuI and Zn<sub>3</sub>K<sub>2</sub>[Fe(CN)<sub>6</sub>]<sub>2</sub>, and also the presence of Pb<sup>2+</sup>, Sn<sup>2+</sup>, and Cd<sup>2+</sup>, produces no substantial effect on the titration; Fe<sup>3+</sup> interferes. On

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*Iordachescu Olga*

RUMANIA/General Division. Congresses. Conventions. Conferences.

A-4

Abs Jour: Ref. Zhur. Biologia, No 4, 1958, 14208

Author : Iordachescu Olga

Inst : \_\_\_\_\_

Title : The International Conference on Vegetable Production at Moscow

Orig Pub: An. Rom.-Sov. Ser. agric., 1957, 11, No 1, 138-141

Abstract: No abstract.

Card : 1/1

-7-

IORDACHESCU, O.

COUNTRY : ROMANIA  
CATEGORY : Cultivated Plants. Potatoes, Vegetables, Cucurbits M  
ABS. JOUR. : EshBiol., No.23 1958, No. 104709  
AUTHOR : Iordachescu, O.  
INST. :  
TITLE : The Best Varieties of Garden Beans for the Conditions of RPH.  
ORIG. PUB. : Gradina, via si livada, 1958, 7, No. 5, 10-13  
ABSTRACT : No abstract.

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IORDACHESCU, O.; MARINESCU, R.; ENACHESCU, G.

Dynamics of certain chemical substances in garden peas in the course of their growth and development. p. 473.

COMMUNICARILE. Bucuresti. Vol. 9, no. 5, May 1959.

Monthly List of East European Accessions (EEAI) LC, Vol. 9, no. 1, January 1960.

Uncl.

RUMANIA

IORDACHESCU, Olga, Engineer, Bucharest [affiliation not given]

"Planting of Early Vegetables."

Bucharest, Natura. Seria Biologie, Vol 15, No 2, Mar-Apr 1963, pp 47-50.

Abstract: Reviews some factors related to the early planting of vegetables, such as the optimal planting period, the preparation of the terrain, planting distance, preparation and planting of transplants, and the needed maintenance operations.

Includes 2 figures.

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IORDACHESCU, Olga, ing.

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Growing and taking care of vegetable seedlings. Natura Biologie  
17 no.1:60-61 Ja-F '65.

IORDACHESCU, P.G.

Device for level checking. Metrologia apl 10 no.2:63-65 F '63.

30586  
R/005/60/000/002/002/002  
D272/D301

9.2574 (1055, 1163, 1144)

AUTHOR: Iordăchescu, Victor, Engineer

TITLE: Molecular generators

PERIODICAL: Telecomunicații, no. 2, 1960, 71-78

TEXT: The performance of molecular generators is analyzed by examining the phenomena upon which it is based and of the problems concerned with this mode of generation. The definition for these generators ("Masers") is given, discussing first the problem of realizing energy level values to permit transition frequencies in the radio range, and showing that realization of high transition probabilities, finding new methods for enrichment of the higher level and the use of suitable substances are the main problems connected with developing these generators. Theoretical considerations are then presented for realizing electronic transitions at radioelectric frequencies, 300,000 - 3,000 Mc/s, the necessary transitions being between levels at distances in the range 0.001 -

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Molecular generators

0.00001 eV, and formulae are presented for calculating spontaneous and radiation stimulated emissions. It is further shown that the probability of atom excitation in the presence of an exterior radiation, is a sinusoidal function of time, that it is necessary to have a larger number of excited molecules (at the moment when the exterior field is applied) than is the number of normal molecules, and that the exterior field of a frequency equal to the transition frequency should be applied during half a node of the probability curve. Molecular generators employing the ammonia molecules beam are then considered, describing the method of sorting the molecules in order to separate the excited molecules which are introduced into the cavity. The dimensions of the cylindrical cavity and the performance of the resulting oscillator are reported. A description of the principles of solid-body masers follows, considering thus the characteristics of two-energy-levels generators, consisting of crystals spiked with foreign donor atoms. The three successive phases of the performance of this type of generator are described. Finally, three-energy-levels generators, with three dis-

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Molecular generators

tinct transitions and distinct frequencies, are examined, presenting the fundamental principles concerned. Performance data on generators of this type, employing gadolinium ethyl sulphate in a lanthanum salt and potassium cobaltocyanide with 0.5% chromium, is reported briefly, discussing the advantages and disadvantages. The application of the various types of molecular generators is then discussed, mentioning the use of their main characteristic - the possibility of creating conditions within it which permit a maximum variation of the spectral line frequency of  $10^{-10}$ , and stressing its main error - the accuracy of the generator frequency determination, depending on the precision of the resonator accord on the spectral line frequency. A molecular generator with special performance is described subsequently (as constructed by N.G. Basov and collaborators at the "Lebedev" Physics Institute AS USSR) [Abstracter's note: No reference stated]. This generator operates on the line  $J = 3$   $K = 3$  of the ammonia molecules beam ( $f = 23,870$  Mc/s). The beam is obtained by means of a copper wire grid (0.05 x 0.05 mm orifices at a distance of 0.05 mm from each other, the grid diameter being

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Molecular generators

5 mm), the molecules being sorted by means of a 4 electrode condenser (length - 10 cm, distance between electrodes - 6 mm). Its performance is discussed. Several Soviet studies are mentioned, concerned with the regime of auto-oscillation, the conditions of auto-oscillation, the amplitude and frequency of the oscillation established, and the stability realized. There are 4 figures and 19 references: 17 Soviet-bloc and 2 non-Soviet-bloc.

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25146

R/005/60/000/005/001/001

D288/D303

~~9.2574~~ (1163)

AUTHOR: Iordăchescu, Victor, Engineer

TITLE: Molecular amplifiers

PERIODICAL: Telecommunicatii no. 5, 1960, 222 - 230

TEXT: The article reviews the principles and application of molecular amplifiers. It is the second part of a paper, the first part of which titled "Molecular generators" was published in "Telecommunicatii", no. 2, 1960. Based on the latter, the author first establishes the physical principles of the molecular amplification of radio waves. The amplification is based on the stimulated radiation of an excited system of atoms, ions or molecules. The amplification may be produced by two or three energy levels of varying population density. Kikuchi, Makhov and Terkhune studied the problem of a maser with four levels using a ruby. According to the location of the maser's active material, the solid state amplifiers are divided into travel-

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D288/D303

Molecular amplifiers

J

ling wave amplifiers and resonant cavity amplifiers. Traveling wave masers with a 20 Mc band can be tuned between 200 and 500 Mc, in a frequency range of 6,000 Mc. The most suitable substances to be used as active materials are gadolinium ethylsulfate; potassium chromicyanide; and ruby. Gadolinium ethylsulfate was the substance used in the first solid state amplifier made by Scovil, Feher, and Zaidel. Potassium chromicyanide is diluted in a cobalticyanide crystal  $[K_3Co(CN)_6]$ , while 0.5% Cr are used as paramagnetic salt. McWhorter and Meyer calculated the energy levels for potassium chromicyanide diluted in cobalticyanide crystal. Because of the low output power of the studied amplifiers, scientists have tried to increase the efficient coupling between the maser material and the microwave field. One of the means tried is the use of a retarding structure of the phase, in order to obtain a relatively long time of the reciprocal action between the signal and the maser's material. Active molecules may be obtained

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Molecular amplifiers

by the method of deviating the molecular beams in a non-homogeneous continuous electric or magnetic field; the method of the auxiliary high-frequency field; the method of optical pumping; and, the method using the Stark square effect. The author then briefly describes a travelling wave maser with gadolinium ethylsulfate and a travelling wave amplifier with a ruby. The signal frequency of the gadolinium ethylsulfate maser was 6,000-6,300 Mc, the feeding frequency 11,700 - 12,600 Mc, and the intensity of the magnetic field  $H \approx 1,800$  Gauss. The amplification obtained was  $\approx 30$  Mc. The central frequency of the ruby amplifier was 5,800 Mc, the tuning range 5,750 - 6,100 Mc, the intensity of the magnetic field 3,930 - 4,070 Gauss, and the feeding frequency 18,900 - 19,500 Mc. The amplification obtained was 23 db. The author finally examines the general characteristics of molecular amplifiers, such as bandwidth, stability and background noise, and presents the most important application possibilities of these types of amplifiers.

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D288/D303

Molecular amplifiers

There are 10 figures and 11 references: 8 Soviet-bloc and 3 non-Soviet-bloc. The reference to the English-language publication reads as follows: J. Weber and Mazeri, Reviews of modern Physics, vol 31, no 3, 1959, p. 681.

Card 4/4

IORDACHESCU-LAZARESCU, Dorothea

New data on the helminthofauna of aquatic birds in Rumania.  
Trav Muz Nat 4:175-180 '63.

IORDAN, G. G., BRODSKIY, V. B. and SOTSKOV, B. S.

"Application of Radioisotopes to Control Technological Processes," a paper presented at the Atoms for Peace Conference, Geneva, Switzerland, 1955

JORDAN, G.G.; BRODSKIY, V.B.; SOTSKOV, B.S.

[Using radioactive isotopes for controlling technological processes] Primenenie radioaktivnykh izotopov dlia kontrolya tekhnologicheskikh protsessov. Moskva, 1955. 17 p.

(MIRA 14:7)

(Radioisotopes--Industrial applications)

JORDAN, G. G.; VERKHOVSKIY, B. I. (Cand. Tech. Sci.); SHUMILOVSKIY, N. N. (Prof.)

"Review of Possible Applications of Radioactivity in Automatics,"

paper read at the Session of the Acad. Sci. USSR, on Scientific Problems of Automatic Production, 15-20 October 1956.

Avtomatika i telemekhanika, No. 2, p. 182-192, 1957.

9015229



JORDAN, G.G.

Use of radioisotope radiation for controlling technological processes. Priroda no.1:4-13 Ja '56. (MLRA 9:8)  
(Radioisotopes--Industrial applications)

JORDAN, G. G. Cand Tech Sci -- (diss) "Study of <sup>the</sup> methods of automatic control  
of level ~~of liquid~~ <sup>fluid</sup> by means of radiation of radioisotopes." Mos, 1957. 15 pp  
including cover, 20 cm (Inst of Automation and Telemechanics, Acad Sci USSR)  
100 copies (KL, 24-57, 118)

MORDKHELOVICH, I.I.; SHUMILOVSKIY, N.N., prof., retsenzent; IORDAN, G.G.,  
spetsred.; VASIL'YEVA, G.N., red.; KISINA, Ye.I., tekhn.red.

[Modern automatic controlling and measuring instruments]  
Novoishie avtomaticheskie kontrol'no-izmeritel'nye pribory.  
Moskva, Pishchepromisdat, 1957. 43 p. (MIRA 12:4)  
(Radioisotopes--Industrial application) (Electronic control)

JORDAN, G.G.

Basic problems of the theory and design of auto-compensated radioactive liquid level indicators. Priborostroenie no.9:10-14 S '57.  
(MIRA 10:10)

(Liquid level indicators)

(Radioactive tracers--Industrial applications)

IORDAN, G. G.

Dissertation

"Investigation of the Method of Automatic Control of the Liquid Level by Means of Radioisotopes," Zavodskaya Laboratoriya, 1957, Vol. 23, Nr 9, pp 1143-1143 (USSR).

SHUMILOVSKIY, Nikolay Nikolayevich, prof., doktor tekhn.nauk; MEL'ITSER,  
LeI' Vladimirovich, kand.tekhn.nauk; ANTIK, I.V., red.; VESHE-  
NEVSKIY, S.N., red.; KULEBAKIN, V.S., red.; SMIRNOV, A.D., red.;  
SOTSKOV, B.S., red.; STEFANI, Ye.P., red.; JORDAN, G.G., red.;  
BOHUNOV, M.I., tekhn.red.

[Using nuclear radiation in units for automatic control of  
industrial processes] Primenenie iadernykh izlucheni v ustroistvakh  
avtomaticheskogo kontrolya tekhnologicheskikh protsessov. Moskva,  
Gos.energ.isd-vo, 1958. 95 p. (Biblioteka po avtomatike, no.1)  
(Automatic control) (Radioisotopes--Industrial applications)

21(8) NAME I BOOK EXPLANATION 509,2764

Vsesoyuznyy Nauchno-Issledovatel'skiy Tsentr po Prikladnoy Radiofizike i Yuzhu Radiatsionnoy i Elektromagnitnoy Vozbuzhdeniya i Vozdeystviya (USSR Academy of Sciences, Moscow, 1957)

Труды... Машиностроения и приборостроения (Transactions of the All-Union Conference on the Use of Radioactive and Stable Isotopes and Radiation in the National Economy and Science, Machine and Instrument Manufacturing) Moscow, Izd-vo AN SSSR, 1958. 358 P. 4,500 copies printed.

Sponsoring Agencies: USSR, glavnoye upravleniye po ispol'zovaniyu atomnoy energii, and Akademiya nauk SSSR.

Editorial Board of Seti, V.I. Dilyubin, Amdarskain (Resp. Ed.), M.M. Smal'yevskiy (Ch. Ed.), Yu. S. Zaslavskiy (Deputy Resp. Ed.), L.K. Zolotarev, M. V. Korovin, G. S. Maslov, L.I. Petrushevskiy and M.G. Zeleninskaya (Secretary).

Ed. of Publishing House: P.M. Belyanin; Tech. Ed.: Y.P. Polonova.

**PURPOSE:** This book is intended for specialists in the field of machine and instrument manufacturing who use radioactive isotopes in the study of materials and processes.

**COVERAGE:** This collection of papers covers a very wide field of the utilization of tracer methods in industrial research and control techniques. The topic of this volume is the use of radioisotopes in the machine- and instrument-manufacturing industry. The individual papers discuss the applications of radioisotope techniques in the study of metals and alloys, problems of friction and lubrication, metal cutting, engine performance, and defects in metals. Several papers are devoted to the use of radioisotopes in the automation of industrial processes, recording and measuring devices, quality control, flowmeters, safety devices, safety services, radiological counters, etc. These papers were published in various journals of the Soviet Institutes and Laboratories. They were published as Transactions of the All-Union Conference on the Use of Radioactive and Stable Isotopes and Radiation in the National Economy and Science, April 4-12, 1957. No personalities are mentioned. References are given at the end of most of the papers.

- Chernyakova, R.B. Method for Estimating the Degree of Degradation of Metals 108
- Oulrayev, B.R., Yu.P. Boroyevskiy, L.M. Potinov, O.M. Mamitov. Study of the Processes of Cast Formation in Sand Molds 112
- Vitkin, A.I. (Tsentrallyy nauchno-issledovatel'skiy institut Chernoy Metallurgii - Central Scientific Research Institute of Ferrous Metallurgy). Study of the Mechanisms of the Basic Processes in Hot Film Plating 119
- Jordan, G.G., and K.S. Furman (Nauchno-Issledovatel'skiy Institut Teploenergeticheskogo Priborostroyeniya - Scientific Research Institute for Heat-Power Instruments). Use of Nuclear Radiation for the Measurement of Heat-Power Parameters 124

- Polonskiy, P.A., I.N. Melnikova, and M.I. Furukov (Tsentrallyy Institut Teploenergeticheskogo Priborostroyeniya - Scientific Research Institute for Heat-Power Instrument Making). Measurement of Gas Flow by Means of Beta Radiation 129
- Jordan, G.G., and T.G. Weyman (Nauchno-Issledovatel'skiy Institut Teploenergeticheskogo Priborostroyeniya - Scientific Research Institute for Heat-Power Instrument Making). Equipment for the Automatic Control of Gas Flow by Means of Beta Radiation Concentrations With Beta Radiation 130
- Agulina, I.G., and A.A. Rudakovskiy (Vsesoyuznyy nauchno-issledovatel'skiy Institut Yuzhu Radiatsionnoy i Elektromagnitnoy Vozbuzhdeniya i Vozdeystviya - All-Union Coal Research Institute). Use of Radioactive Isotopes in the Automation of Examining and Drifting Machines 130
- Jordan, G.G., and K.S. Furman (Nauchno-Issledovatel'skiy Institut Teploenergeticheskogo Priborostroyeniya - Scientific Research Institute for Heat-Power Instrument Making). Measuring the Density of Liquids With Gamma Radiation 133

S/194/61/000/012/009/097  
D209/D303

AUTHOR: Iordan, G. G.

TITLE: Theoretical bases of design of radioactive autocompensated level-meters

PERIODICAL: Referativnyy zhurnal, Avtomatika i radioelektronika, no. 12, 1961, 31, abstract 12A228. (V. Sb. Radioakt. metody kontrolya i regulir. proizv. protsessov. Riga, AN Latv SSR, 1959, 45-54)

TEXT: The theory and method of determining the threshold of sensitivity as a basic level-meter characteristic, as well as the applicable instruments are described. 3 characteristic positions of the system radiation source-receiver with respect to the liquid level ("below level", "above level" and "hard against level") are examined. Principle operating diagrams of the autocompensated level-meter and a speed counting meter are given. An experimental test of the instrument  $\gamma\rho-4$  (UR-4) on various objects of measurement proved the correctness of the theoretical derivations. There  
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Theoretical bases of ...

S/194/61/000/012/009/097  
D209/D303

are 2 figures. 6 references. [Abstractor's note: Complete translation...]



Card 2/2

21(3), 9(6) SOV/119-59-3-8/15  
AUTHORS: Iordan, G. G., Candidate of Technical Sciences, Meyman, T. G.,  
Engineer, Furman, K. S., Engineer

TITLE: Safety Technique in the Extensive Introduction of Radioactive  
Apparatus (O tekhnike bezopasnosti pri shirokom vnedrenii  
radioaktivnykh priborov)

PERIODICAL: Priborostroyeniye, 1959, Nr 3, pp 21-22 (USSR)

ABSTRACT: The directives of the XX Congress of the KPSS contained the  
following passage: Plans must be established in due time  
for a more extensive use of radioactive radiation in in-  
dustries, agriculture, and medicine, in particular for the  
quality control of materials, for the inspection of production  
processes and their automatic control. In recent times such  
apparatus have been developed and introduced into industries.  
The radioactive level gage UR-4 is widely used in the control  
of the level of liquid chlorine in containers in various  
production processes. The radioactive level indicator RIU-1  
measures the maximum and minimum height of dust in dust  
eliminators used in roasting pyrites in the "rimming zone".  
The radioactive device PZhR intended for the measurement of  
the density of fluids is used in the production of chlorinated

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SOV/119-59-3-8/15

Safety Technique in the Extensive Introduction of Radioactive Apparatus

oil, electrolytic soda, calcium chloride, etc. Special care must be taken in the use of radioactive apparatus which operates with gamma-radiation, and the same holds for apparatus using high-energy  $\beta$ -radiation. 250 of the 500 large industrial plants in the USA use radioactive isotopes in one or another form. In 1957 the use of radioactive isotopes saved 406 million dollars, and this figure will climb to 5 billion dollars in about 5 years. At present all directions for use of radioactive apparatus include specifications as to their installation and operation. If these specifications are strictly complied with, an irradiation of personnel with prohibitively high doses (that is 0.05 roentgen per working day) is excluded. In practice, however, it appeared that the unclear wording of these specifications renders control and sanitary inspection more difficult. Hence it is necessary to issue specialized sanitary regulations for the application of radioactive apparatus with inherent gamma-sources for technological inspection purposes. According to the opinion of the authors these regulations should be based upon the following considerations: In places where people are working who are not professionally engaged in work with ionizing

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SOV/119-59-3-8/15

Safety Technique in the Extensive Introduction of Radioactive Apparatus

radiation, the radiation dose originating from technological inspection apparatus should not exceed one tenth of the maximum admissible radiation dose. If this requirement is to be satisfied in practice, it is necessary to keep the dose rate on the surface of such apparatus below 0.2 microroentgen/second. The majority of apparatus which is in use at present do not comply with this standard, and if such "sub-standard" equipment is employed, additional protective measures are required. Subsequently, formulas for safety clearances are derived and applied to special cases. The safety clearances can also be determined with a dosimeter. It appears to be expedient that the manufacturers of radioactive apparatus should send a team of specialists to customers who will look after the installation of the equipment in a suitable place. A report is given on the problems involved in transporting such equipment and on its regular inspection. Finally, the authors express their gratitude to L. N. Balanina, researcher at the Institut gigiyeny truda i profzabolevanly (Institute of Labor Hygiene and Professional Diseases) for her valuable assistance.

Card 3/4

SOV/119-59-3-8/15

Safety Technique in the Extensive Introduction of Radioactive Apparatus

There are 3 references, 2 of which are Soviet.

Card 4/4

JORDAN, G. G.

137

PHASE I BOCK EXPLOITATION

BOV/5486

Vsesoyuznoye soveshchaniye po vnedreniyu radioaktivnykh izotopov i yadernykh izlucheniya v narodnoye khozyaystvo SSSR. Riga, 1960.

Radioaktivnyye izotopy i yadernyye izlucheniya v narodnom khozyaystve SSSR; trudy soveshchaniya v 4 tomakh. t. 1: Obshchiye voprosy primeneniya izotopov, pribory s istochnikami radioaktivnykh izlucheniya, radiatsionnaya khimiya, khimicheskaya i neftepererabatyvayushchaya promyshlennost' (Radioactive Isotopes and Nuclear Radiations in the National Economy of the USSR; Transactions of the Symposium in 4 Volumes. v. 1: General Problems in the Utilization of Isotopes; Instruments With Sources of Radioactive Radiation; Radiation Chemistry; the Chemical and Petroleum Refining Industry) Moscow, Gostoptekhnizdat, 1961. 340 p. 4,140 copies printed.

Sponsoring Agency: Gosudarstvennyy nauchno-tekhnicheskii komitet Soveta Ministrov SSSR, and Gosudarstvennyy komitet Soveta Ministrov SSSR po ispol'zovaniyu atomnoy energii.

Ed. (Title page): N.A. Petrov, L.I. Petrenko and P.S. Savitskiy; Eds. of this Vol.: L.I. Petrenko, P.S. Savitskiy, V.I. Sinitsin, Ya. M. Kolotyarkin, N.P. Syrksa and R.F. Romm; Executive Eds.: Ye. S. Levina and B. F. Titskaya; Tech. Ed.: E.A. Makhina.

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Radioactive Isotopes (Cont.)

SOV/5486

**PURPOSE:** The book is intended for technical personnel concerned with problems of application of radioactive isotopes and nuclear radiation in all branches of the Soviet economy.

**COVERAGE:** An All-Union Conference on problems in the introduction of radioactive isotopes and nuclear radiation into the national economy of the Soviet Union took place in Riga on 12-16 April 1960. The Conference was sponsored by: the Gosudarstvennyy nauchno-tekhnicheskiy komitet Soveta Ministrov SSSR (State Scientific and Technical Committee of the Council of Ministers, USSR); Glavnoye upravleniye po ispol'zovaniyu atomnoy energii pri Soveta Ministrov SSSR (Main Administration for the Utilization of Atomic Energy of the Council of Ministers, USSR); Academy of Sciences, USSR; Gosplan USSR; Gosudarstvennyy komitet Soveta Ministrov SSSR po avtomatizatsii i mashinostroyeniyu (State Committee of the Council of Ministers, USSR, for Automation and Machine Building) and the Council of Ministers of the Latvian SSR. The transactions of this Conference are published in four volumes. Volume I contains articles on the following subjects: the general problems of the Conference topics; the state and prospects of development of radiation chemistry; and results and prospects of applying radioactive isotopes and nuclear radiation in the petroleum refining and chemical industries. Problems of designing and manufacturing instruments which contain sources of radioactive radiation and are used for checking and automation of technological processes are examined, along with problems of accident prevention in their use. No personalities are mentioned. References accompany some of the articles.

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6

Radioactive Isotopes (Cont.)

SOV/5486

Fradkin, G.M., and Ye. Ye. Kulish. Sources of $\alpha$ -, $\beta$ , $\gamma$ -, and Neutron Radiations for the Checking and Automation of Technological Processes	95
Bogdanov, N.I., and K.P. Zakharova. Some Types of $\beta$ -Radiation Sources Based on $Sr^{90}$	110
Jordan, G.G., K.S. Furman, and T.G. Neyman. Industrial Safety Problems Involved in the Wide Implementation of Instruments With Radioactive Radiation Sources	116
Bovin, V.P. Principles of Development of Directivity Radiometers	121
Bogdanov, N.I., N.A. Damberg, A.D. Tumul'kan, and V.A. Yanushkovskiy. Use of Standard $\beta$ -Radiation and Bremsstrahlung Sources in Technological Checking Instruments for Production	125

Card 5/12



S/119/63/000/003/002/010  
D201/D308

AUTHORS: Jordan, G.G. and Ovchinnikov, Yu.M.

TITLE: Problems in the theory and design of beta-rays  
thickness-gages for measuring of coatings

PERIODICAL: Priborostroyeniye, no. 3, 1963, 7-10

TEXT: The authors consider briefly the theory of operation of beta-rays thickness-gages and in particular the error due to the statistical fluctuation of ionization current in differential thickness gages, as dependent on the difference in the atomic numbers of the main and compensating sources, on the back-scatter coefficient and on the activity, geometry and efficiency of radiation sources. Hence the activity of the source is determined for optimum sensitivity of the instruments both with complimentary radioactive source and an electronic method of compensation. The theory and experimental results were incorporated into the design of type БТН-1 (BTP-1) thickness gage for the printing industry which was manufactured since 1961 at the Tallinskiy opytnyy zavod kontrol'no-izmeritel'

Card 1/2

Problems in the theory ...

S/119/63/000/003/002/010  
D20L/D308

nykh priborov (Tallin experimental plant of control and measuring instruments). There are 3 figures.

Card 2/2

ACC NR: AP0015000

(N)

SOURCE CODE: UR/0413/66/000/009/0087/0087

INVENTOR: Jordan, G. G.; Kurnosov, N. M.; Levinson, B. A.; Lychakov, N. I.; Tikhomirov, V. P.

ORG: None

TITLE: A radio interference level indicator. Class 42, No. 181326 [announced by the Scientific Research Institute of Heat and Power Engineering Equipment (Nauchno-issledovatel'skiy institut teploenergeticheskogo priborostroyeniya)]

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 9, 1966, 87

TOPIC TAGS: liquid level indicator, electromagnetic wave interference, electronically variable capacitor

ABSTRACT: This Author's Certificate introduces a radio interference level indicator based on using reflection of high-frequency electromagnetic oscillations from the surface of the medium to be monitored. The unit contains a high-frequency oscillator connected through a length of transmission line to a coaxial pickup and a measurement circuit. Measurement accuracy and reliability are improved by connecting an element in the transmission line with a reactance which depends on the voltage applied to it, e. g. a voltage-variable capacitor. This element compensates the electrical length of the line under the effect of a voltage proportional to the level being measured.

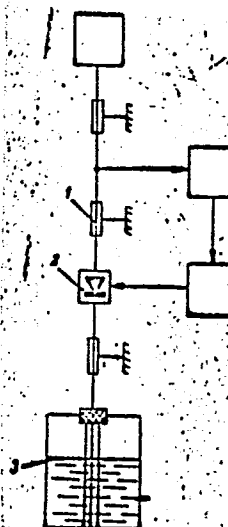
Card 1/2

UDC: 681.128.82

ACC NR: AP6015688

1--transmission line;  
2--voltage-variable  
capacitor; 3--level  
to be measured

SUB CODE: 14, 09/ SUBM DATE: 21Jul64



Card 2/2

JORDAN, Ion

Some economic geographical considerations on the Ajlaj depression.  
Probleme geog 8:399-418 '61.

IODAN, Ion (Bucuresti)

New subbranches in chemical and rubber industries of Rumania.  
Natura Geografie 13 no.3:43-50 My-Je '61.

IODAN, Ion; BARCO, Aurelia

Agricultural economy of southern Baraganu and Balta Ialomitel.  
Probleme geog 9:257-271 '62. (publ. '63)

IORDAN, Ion; VELCEA, Ion; IACOB, Gh.; GHENOVICI, Alexandra

The economic map of Rumania. Natura Geografie 16 no. 1:3-7  
Ja-F '64.



DEICA, P., cercetator (Bucuresti); JORDAN, I., cercetator (Bucuresti);  
OANCEA, D., cercetator (Bucuresti)

The preurban area of Craiova. Natura Geografie 17 no.1:32-42 Ja-F  
'65.

RAILEANU, Gr.; IORDAN, Magdalena

Study on the Liassic brachiopods in the Svinita region. Studii  
cerc geol 9 no.1:3-24 '64

1. Chair of Geology of the Faculty of Geology and Geography of the  
Bucharest University.

BRODSKAYA, N.I.; GERBER, M.I.; JORDAN, S.S.

Influence of the addition of some cations and buffered solutions  
on the regeneration of arsenic-sodium carbonate solutions. Zhur.  
prikl.khim. 31 no.1:13-19 Ja '58. (MIRA 11:4)

1. Leningradskiy nauchno-issledovatel'skiy institut po pererabotke  
nefti i polucheniyu iskusstvennogo zhidkogo topliva.  
(Cations) (Arsenic) (Sodium carbonates)

TELEPNEV, D.Ya.; IORDAN, V.V.; RALASHOV, T.M.

Industrial testing of a concrete placer. Ugol' Ukr. 7 no.10:  
37-38 0 '63. (MIRA 17:4)





67T22-...

Apr 1948

JORDAN, YE. F.

USSR/Chemistry - Amalgams, Tin  
Chemistry - Electrocapillarity

"Research on the Electric Capillary Phenomenon in Amalgams of Tin and Bismuth,"  
S. V. Karpachev, V. P. Kochergin, Ye. F. Jordan, Electrochem Lab, Ural Affiliate,  
Acad Sci USSR, Sverdlovsk, 6 pp

"Zhur Fiz Khim" Vol XXII, No 4

Electrocapillary phenomenon in amalgams of tin evidence minimum surface tension, while  
amalgams of bismuth evidence maximum surface tension. Conducted studies to determine  
the elasticity of mercury vapors on subject amalgams at temperatures of 420°.  
Submitted 23 Jul 1947

IORDAN, YE F.

USSR/Mining - Underground Fires, Mine Safety

Jul 52

"Prevention of Endogenous Fires in Copper-Pyrite Mines," A. A. Ivanov, K. M. Charkviani, N. P. Diyev, K. V. Kochnev, Z. G. Sheina, Ye. F. Iordan, F. N. Pavlov

"Iz Ak Nauk, Otdel Tekh Nauk, Otdel Tekh Nauk" No 7, pp 1037-1044

Presents results of works conducted since 1947 by a group of Soviet investigators studying causes of underground fires and establishing preventive measures. Discusses selection of mining system safe in respect to fires, silting as basic preventive measures against underground fires, and ventilation for cooling ore rocks and for maintaining normal temp conditions in mines. Submitted by Acad A. A. Skochinskiy  
1 Apr 52.

PA 228T99



JORDAN, S. E.

USSR 1

Adiabatic oxidation of sulfide ores. F. N. Pavlov, S. F. Jordan, and N. P. Drey. *Dokl. Akad. Nauk SSSR*, 1953, 168, 2, 36-38. 2

Powered (2 mm.) sulfide ore contg.: Fe 42.2, S 50.5, Cu 1.85, SiO<sub>2</sub> 2, and Al<sub>2</sub>O<sub>3</sub> 2% was oxidized under adiabatic conditions in a slow current of air satd. with H<sub>2</sub>O at room temp. and brought up to the temp. of the ore. The temp. rose continuously up to 380° in 206 hrs. Then it rose abruptly reaching 450° in 8 hrs. producing SO<sub>2</sub> and, at the higher temp., some free S. The presence of wood was not essential and mixing the ore with clay retarded but did not prevent oxidation. I. Ilencovitz.

*Handwritten signature*



JORDAN, Ye. F.

USSR/Cosmochemistry - Geochemistry. Hydrochemistry

D.

Abs Jour : Referat Zhur - Khimiya, No 2, 1957, 4166

Author : Pavlov, F.N., Plyusnin, V.G., Jordan, Ye. F.  
Title : Search for Organic Compounds Inhibiting the Oxidation  
of Sulfide Ores.

Orig Pub : Zh. prokl. khimi, 1956, 29, No 2, 166-175

Abstract : Control of underground fires at pyrite deposits can be effected not only by mechanical but also by chemical means on utilizing water soluble substances which prevent oxidation -- antioxidants or inhibitors. Over a period of 65 days experiments were carried out on testing various inhibitors: 1) tar water; 2) technical xylenes; 3) aniline; 4) phenyl hydrazine; 5) furfural; used in the form of aqueous solutions, and for the sake of comparison therewith, also of tap water. Operational procedures and the results are described in detail. It was found that some organic substances, such as phenol

Card 1/2

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USSR/Cosmochemistry - Geochemistry. Hydrochemistry

D.

Abs Jour : Referat Zhur - Khimiya, No 2, 1957, 4166

and its derivatives, are inhibitors of oxidation of polysulfide ores by atmospheric oxygen. It is shown that moistening of the ore with a solution of xylenes or with tar water slows down the process by 13-14 times.

Card 2/2

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