

GOIA, I., prof.; CHIRTOC, G.; NESEU, A.; GRACIUN, T.

Acute rheumatic polyvisceritis. Rumanian M. Rev. 3 no.3:48-52  
J1-S '59.

1. 2nd Medical Clinic, Cluj.  
(RHEUMATISM)

CRACIUN, Teofil

SURNAME, Given Names

Country: Rumania

Academic Degrees: Candidate-in-Agricultural Sciences; -Candidat in Stiinte  
Agricole.-

Affiliation: -not given-

Source: Bucharest, Stiinta si Tehnica, No 9, Sep 1961, pp 8-10.

Data: "Ever More Productive Varieties for the Socialist Agriculture."

GPO 981643

GRACIUN, Teofil, conf. univ., candidat in stiinta

Cytogenetics and hybrid seeds. St si Teh buc 15 no.11:14-15  
N '63.

IONESCU, Mircea; CRACIUN, Teofil; CIOFU, Angela

Modification of chemical characteristics of agricultural plants  
by hybridization. Studii cerc chim 12 no. 7:393-397 '64

1. Agronomic Institute, Bucharest, B-dul Marasti, no.53.

CRACIUN, Teofil, conf. univ., candidat in stiinta

Biological role of chromosomes. St si Teh Buc 16 no. 3:  
38-42 Mr '64.

POPESCU, I.; CRACIUN-CIOBANU, Aglaia; PONI, Margareta

Coordinative combinations of  $Tl^{III}$  with citric acid. Studii chim  
Iasi 14 no.1:43-64 '63.

1. Filiala Iasi a Academiei R.P.R., Institutul de chimie "P.Poni",  
Sectia de chimia combinatiilor coordinative.

FISEL, Simon; CRACIUN-CIOBANU, Aglaia; POPESCU, Ion; PONI, Margareta

A new spectrophotometric method for determination of Tl (III).  
Rev chimie Roum 9 no.8/9:559-563 Ag-S '64.

1. "Petru Poni" Institute of Chemistry, Rumanian Academy, Iasi  
Branch.

POPESCU, Ioa; FISEL, Simon; GRACI N-CIOBANU, Aglaia; GOSIODARU, Profira

III

Contributions to the study of 1:1 complexes. Rev chimie Roum 9  
no.10:619-626 0 '64.

1. Section of Inorganic Chemistry of the "Petru Poni" Institute of  
Chemistry of the Rumanian Academy, Iasi Branch, 41 A Alsea Grigore  
Ghica Vocea.



FISER, Simon; CRACIUN-CIOBANU, Aglaia; POPESCU, Ion; PONI, Margareta

A new spectrophotometric method for Tl (III) determination.  
Studii cerc chim 13 no.8/9:595-599 Ag-S '64.

1. "P.Poni" Institute of Chemistry of the Romanian Academy, Iasi  
Branch, 41 A Aleea Grigore Ghica Voda.

POPESCU, I.; FISEL, S.; CRACIUN-CIOBANU, A.; GOSPODARU, P.

Contributions to the study of complex combinations of trivalent thallium. Studii cerc chim 13 no.10:659-666 0 '64.

1. Section of Inorganic Chemistry, "Petru Poni" Institute of Chemistry, Rumanian Academy, Iasi Branch, 41 A Aleea Cirgore Ghica Voda.

PAUCU, Nicolai, dipl. ing. (Rumania); SINGER, Georges, dipl. ing. (Rumania);  
CABACDIN, Ion, dipl. ing. (Rumania); CRACIUNEANU, Constantin,  
dipl. ing. (Rumania); SCHWARTZ, Marty, dipl. ing. (Rumania)

State of development of low-quality coal-fired steam boilers.  
Ipari energia 5 no.3:69-70 M '64.

PANOIU, N., ing.; CARABOGDAN, I., ing.; SINGER, C., ing., CRACIUNEANU, C., ing.

Actual stage and prospects of steam boilers with cyclone  
furnaces and liquid slag removal. Energetica Rom 11 no.10:  
497-503 0'63.

NATCU, I., ing.; BRINZAN, I., ing.; GRACIURESCU, I.

Method and device for measuring the real unitary compression  
stresses in concrete. Rev constr si mat constr 16 no.4:203-204  
Ap'64

L 29783-66 EWP(c)/EWP(v)/EWP(j)/EWP(k)/EWP(h)/EWP(l) RM

ACC NR: AF6020834

SOURCE CODE: RU/0003/65/016/009/0419/0423

AUTHOR: Toma, I.; Graciunescu, V.; Babaita, Valeria

ORG: Faculty of Industrial Chemistry, Polytechnical Institute, Timisoara  
(Facultatea de Chimie Industriala, Institutul Politehnic)

TITLE: Some observations regarding production capacity in the chemical industry

SOURCE: Revista de chimie, v. 16, no. 9, 1965, 419-423

TOPIC TAGS: chemical industry, industrial production

ABSTRACT:

The authors call attention to some peculiarities in the interpretation, calculation and analysis of the production capacity of the chemical industry arising from the complexity of the manufacturing processes involved, and show the dependence of this capacity on a number of variable factors. A method for the calculation and analysis of production in terms of such factors (for example, surface area involved in a reaction) is presented. Orig. art. has: 22 formulas and 1 table. [Based on authors' Eng. abstract]. [JPRS]

SUB CODE: 05, 07 / SUBM DATE: none / ORIG REF: 002

Card 1/1 ✓

UDC: 66.012.42:338.062.13

11690-66

ACC NR: AP6031210

SOURCE CODE: RU/0004/65/000/004/0151/0160

AUTHOR: Toma, Ioan (Lecturer); Craciunescu, Victor (Lecturer; Assistant Chief Project Services); Cocirla, Trandafir (Lecturer)

77  
B

ORG: Polytechnic Institute, Timisoara (Institutul Politehnic); [Craciunescu] "Electromotor" Enterprise, Timisoara (Intreprinderea "Electromotor")

TITLE: Economic efficiency of the introduction of modern techniques in the manufacturing of micromotors at the 'Electromotor' Enterprise of Timisoara

SOURCE: Electrotehnica, no. <sup>A</sup>4, 1965, 151-160

TOPIC TAGS: electric motor, microelectronic component

ABSTRACT: The authors discuss the methodology of calculating the economic efficiency of the introduction of new techniques in terms of the possibilities of the means of production, and analyze in general terms the economic effects and efficiency of the introduction of new techniques in the manufacture of micromotors at the "Electromotor" enterprise. Orig. art. has: 14 figures and 5 tables. [Based on authors' Eng. abst.] [JPRS]

SUB CODE: 09 / SUBM DATE: none / ORIG REF: 001

Card 1/1 af

UDC: 621.313.17:621.312.003.1 (498) EMT

0718 2643

RUMANIA

COSCIUG, V.; and CRACIUNESCU, V., Experimental Agricultural Station  
(Statiunea experimentală agricolă) Podu Iloaie

"Growth of Material Incentives Aimed at Increasing the Animal Production  
in the Agricultural Cooperative of the Iassi Region"

Bucharest, Revista De Zootehnie si Medicina Veterinara, Vol 16, No. 7  
June 1966; pp 32-43

Abstract: [English summary modified] Review of efforts to increase productivity by using incentive premiums to all workers for production exceeding plan, and method of control and implementation on several cattle farms in Iassi region; dairy production; big farms. Tabulated data on monies paid out in 4 farms in 1965 and of rationale therefor; 3 dairy farms 1963 and 1965 showing increase in production. Figures plainly demonstrate that this method of encouraging special efforts is worthwhile. 3 tables, 7 Rumanian references.

1/1



RUMANIA/Chemical Technology - Chemical Products and Their Applications - Drugs, Vitamins, Antibiotics. H.

Abs Jour : Ref Zhur - Khimiya, No 11, 1958, 37220

Author : Popper, E., Arton, N., Craciuneanu, R.

Inst : -

Title : Application of the Method Lead Analysis, by Means of Mercaptans, to the Standard Pharmaceutical Products.

Orig Pub : Farmacia (Roman), 1957, 5, No 4, 304-309

Abstract : A semi-commercial quantitative method of Pb determination in Pb-containing solutions of standard preparations is described. It consists in Pb precipitation by an alcoholic solution of phenylhydrazide-carbothioimide (I). (I) is stable and may be easily synthesized. The method is exact, sensitive, and convenient and may be applied in the presence of alkali and alkali-earth metals. It yields good results down to a minimum concentration of Pb = 200  $\mu$  /ml.

Card 1/1

CRACIUNEANU, R.

RUMANIA/Analytical Chemistry + Analysis of Onorganic Substances. E-2

Abs Jour : Ref Zhur - Khimiya, No 8, 1958, 24757

Author : Pepper, E., Arition, N., Proinov, L., Craciuneanu, R.

Inst : -

Title : New Rapid Method of Gravimetric Determination of Mercury

Orig Pub : Rev. chim., 1957, 8, No 9, 594-596

Abstract : For the determination of  $Hg^{2+}$  use is made of a new reagent 2-mercapto-5-anilino-1,3,4-thiodiazole (I) (RZhKhim, 1958, 24774), which is a white-yellow powder, MP 215-216°, readily soluble in  $C_2H_5OH$ , less soluble in alkalies and insoluble in water. I precipitates  $Ag^+$ ,  $Pb^{2+}$ ,  $Hg^{2+}$ ,  $Hg^{2+}$ ,  $Bi^{3+}$ ,  $Cu^{2+}$ ,  $Co^{2+}$  and  $Fe^{3+}$ .  $Hg^{2+}$  ions form with I a yellow precipitate insoluble in  $C_2H_5OH$  and in ether and suitable for gravimetric determination of Hg. The solution being analyzed, containing Hg as  $HgCl_2$  or  $Hg(NO_3)_2$  (concentration of free  $HNO_3$  not above 0.2-0.3 N), is diluted with twice its volume of  $C_2H_5OH$ , and  $Hg^{2+}$  is precipitated with

Card 1/2

RUMANIA/ Analytical Chemistry - Analysis of Inorganic Substances.      E-2

Abs Jour : Ref Zhur O Khimiya, No 8, 1958, 24757

a 5% alcohol solution of I under continuous stirring. Solution and precipitate are heated on a water bath until the amorphous precipitate becomes crystalline, filtered immediately through a filter crucible No 5 or No 4, the precipitate is washed with alcohol and ether, dried in a vacuum-desiccator and weighed. If the concentration of HNO in the solution being analyzed is above 0.3 N the solution is evaporated to dryness and the residue is dissolved in water acidified with HCl. The minimum determinable amount of Hg<sup>2+</sup> is 40/ml. Duration of determination is from 45 minutes to 2 hours; error  $\pm$  0.54%. The method is suitable for determination of Hg in medicinals.

Card 2/2

19

COUNTRY	:Rumania	CRACIUNENU, R.	H-17
CATEGORY	:		
ABS. JOUR.	: RZKham., No. 21	1959, No.	75793
AUTHOR	:Popper, E., Arition, N., Proinov, L., and Craciunea*		
INST.	:Not given		
TITLE	:The Analysis of Mercury Medicinal Preparations by a Rapid Gravimetric Method Using 2-Mercapto-5-Anilino-1,3,4-Thiodiazole		
ORIG. PUB.	:Farmacia (RPR), 6, no 6, 491-498 (1958)		
ABSTRACT	:A new gravimetric is proposed for the determination of Hg in medicinal preparations, using 2-mercapto-5-anilino-1,3,4-thiodiazole. The above-indicated reagent is very sensitive (accurate determinations of Hg in medicines are possible at minimum concentrations of Hg of 40 gammas per ml); it is readily prepared, and can be used in any analytical laboratory. The authors propose the substitution of the above-described method for the official methods in the analysis of a number of medicines listed in the Rumanian Pharmacopoeia.		
CARD:	1/1	From authors' summary	
	* nu, R.		219

COUNTRY : Czechoslovakia R-27  
CATEGORY :  
ABS. JOUR. : RZKhim., No. 21 1959, No. 75435  
AUTHOR :  
INST. :  
TITLE :  
ORIG. PUB. :  
ABSTRACT : in the consumption of M. The germination of the M in drums results in a higher DA than germination in compartments. Optimum germination time was found to be 10-12 days for barley and wheat M and 8-10 days for rye and oats M. In the production of brewers' malt, barley M was given the highest rating. Data on the composition of various types of raw materials and M are given together with comparison data for brewers' and distillers' M.  
G. Oshmyan

CARD: 2/2

283

RUMANIA/*Analytical Chemistry - Analysis of Inorganic Substances.* E-2

Abs Jour : Ref Zhur - Khimiya, No 2, 1959, 4303

Author : Popper, E., Craiunceanu, R., Ariton, N.

Inst : -

Title : The Reaction of Divalent Mercury with Monophenylhydrazodithiocarbamide, Monoallylhydrazodithiocarbamide, and Mononaphthylhydrazodithiocarbamide.

Orig Pub : Rev Chim, 9, No 4, 216-218 (1958) (in Rumanian with summaries in German, English, French, and Russian)

Abstract : The reaction of Hg(II) with monophenylhydrazodithiocarbamide, (I) (RZhKhim, 1958, 43027), monoallylhydrazodithiocarbamide (II), and mononaphthylhydrazodithiocarbamide (III) has been investigated with a view of the possible replacement of H<sub>2</sub>S in qualitative chemical analysis and development of a method for the determination of Hg(II). It has been found that I and II in alcoholic solution quantitatively precipitate Hg(II) with the formation of stable

Card 1/2

RUMANIA/Analytical Chemistry - Analysis of Inorganic Substances. E-2

Abs Jour : Ref Zhnr - Khimiya, No 2, 1959, 4303

mercaptides which are insoluble in  $C_2H_5OH$  and in ether. In the case of I the filtration of the precipitates equivalent to 0.02-0.08 gm Hg is continued for 2.5-6 hrs; when II is used, the filtration time is 30 min-3hrs. In view of the difficulties encountered in the filtration of the precipitates, I and II cannot be recommended for the gravimetric determination of Hg(II). When III is used, non-uniform and unstable gelatine-like precipitates are obtained. I, II, and III are easily synthesized compounds and represent amorphous white powders soluble in pyridine, alkalis, and  $C_2H_5OH$  and insoluble in water and in acids; they can be used in the separation of the cations of the fourth analytical group. -- B. Manole

Card 2/2

- 15 -

POPPER, E.; POPA, L.; PROINOV, L.; ROMAN, L.; CRACIUNEANU, R.; JUNIE, V.

Behavior of some heavy cations towards certain organic reagents.  
Studii cerc chim 9 no.2:397-404 '61.

1. Facultatea de farmacie, Laboratorul de chimie analitica, Cluj.

(Cations)      (Organic compounds)  
(Chemical tests and reagents)



SURNAMES, Given Names

CRACIUNEANU, R. (1)

Country: Rumania

Academic Degrees: [not given]

Affiliation: -not given-

Source: Bucharest, Revista de Chimie, Vol 12, No 9, Sep 1961, pp 557-558.

Data: "Behavior of Silver Ion Towards Two Reagents of the Mercaptan Class."

Authors:

POPPER, I.

PODTHIV, I.

CRACIUNEANU, R.

670 901643

POPPER, E.; ROMAN, L.; CRACIUNEANU, R.; FLORIAN, E.

Studying the behavior of the cations of the 3d analytical group towards a class of organic reagents. Rev chimie Min petr 13 no.6:372-374 Je '62.

1. Laboratorul de chimie analitica Facultatea de Farmacie Institutul medico-farmacentic, Cluj.

POPPER, B.; PROINOV, L.; CRACIUNEANU, R.

Behavior of the silver ion in the presence of two reagents  
of the mercaptan class. Rev. chimie Min petr 12 no.9:557-558  
S'61.

STATICESCU, P., ing.; OLTEANU, Gh., dr.; MATEI, A., ing.; MUNTEANU, E.  
ing.; LUTSCH, M., ing.; POPA, I., ing.; RACZ, Z., ing.;  
COSMA, I., ing.; LENGYEL, V., ing.; LUNGU, C., ing.;  
SINGER, M., ing.; CRETU, I., ing.; GRIGORAS, m., ing.;  
CRACIUNESCU, C., ing.; COLIS, I., ing.; BACOS, M., ing.;  
ALEXANDRESCU, T., ing.; HERZOVAN, I., ing.; TOARNICZSKI, E., ing.;  
OCHIANA, S., ing.; MOCANU, E., ing.

Results obtained with different varieties in sugar-beet  
growing. Ind alim 14 no.9:342-348 S'63.

1. Fabrica de zahar Giurgiu (for Matei, Munteanu).
2. Fabrica de zahar Bod (for Lutsch, Popa).
3. Fabrica de zahar Tg. Mures (for Racz, Cosma, Lengyel).
4. Fabrica de zahar Roman (for Lungu, Singer).
5. Fabrica de zahar Bucecea (for Cretu, Grigoras).
6. Fabrica de zahar Oltenia (for Craciunescu, Colis).
7. Fabrica de zahar Banat (for Bacos).
8. Fabrica de zahar Arad (for Alexandrescu, Erzovan).
9. Fabrica de zahar Ludus (for Toarniczski, Ochiana).
10. Fabrica de zahar Sascut (for Mocanu).

STATICESCU, P.; LUNGU, G.; OLTEANU, Gh.; CRACIUNESCU, C.; ALBERT, A.;  
MUNTEANU, E.

Studies on the keeping conditions of sugar beets. Ind alim  
16 no.3:157-162 Mr '65.

1. Food Research Institute, Bucharest (for Staticescu).
2. Roman Sugar Plant (for Lung ).
3. Ministry of the Food Industry (for Olteanu).
4. Podari, Sugar Plant (for Craciunescu).
5. Bod Sugar Plant (for Albert).
6. Giurgiu Sugar Plant (for Munteanu).

*Handwritten:* 11/11

Colorimetric modification of the thymol reaction by the determination of cholesterol in the lipoprotein complex. R. Crangnesen. *Comm. Acad. Rep. Populare Romania* 3, 15-17 (1953). Cholesterol was detd. in the lipoprotein complex, obtained by treating the serum with Machigan's reagent (cf. C.A. 39, 1218F) and using the Liebermann-Burchard color reaction. This method was useful in patients with infectious icterus; the thymol reaction, being strongly pos., allows a diagnosis of hepatic icterus, differentiating it from cases with mech. icterus. The amt. of cholesterol in the protein complex is proportional to the intensity of the thymol reaction, reaching values from 70 to 150 mg. % while in normal cases only 12-33 mg. % is found.

*Handwritten:* L

Francis K. ...

CRACIUNESCU, M.

Multiplication of fractions.

p. 312 (Gazeta Matematica Si Fizica) Vol. 9, no. 6, June, 1957, Bucuresti, Rumaria

SO: MONTHLY INDEX OF EAST EUROPEAN ACCESSIONS (EEAI) LC, VOL. 7, NO. 1, JAN. 1958

Graciunoiu, V.

Automatic intermittent regulation of temperature in electric furnaces with resistance. p. 483. ELECTROTEHNICA. (Asociata Stiintifica a Inginerilor si Tehnicienilor din Romania si Ministerul Energiei Electrice si Industrii Electrotehnice) Bucuresti. Vol. 3, no. 11, Nov. 1955

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



L 1205-66 EPA(s)-2

ACCESSION NR: AP5025841

RU/0004/65/000/003/0096/0103

AUTHOR: <sup>44</sup>Craciunescu, Victor (Engineer, Chief designer) (Timisoara); <sup>34</sup>Mogos, Romanus (Chief planning engineer) (Timisoara) <sup>35</sup>

TITLE: Some technical and economic considerations concerning the present series of asynchronous motors with short-circuited rotors produced by the "Electromotor" Enterprise in Timisoara

SOURCE: Electrotehnica, no. 3, 1965, 96-103

TOPIC TAGS: <sup>29, 44</sup>electric motor, electric engineering, electric rotating equipment part

ABSTRACT: [Authors' English summary modified]: A technical-economic analysis of the favorable results obtained through the redesigning of the asynchronous motors with squirrel-cage rotors produced by the "Electromotor" Enterprise. The improvements made in the design include the use of high-quality insulating materials and the standardization of the component elements within the fundamental series and the derived series of equipment. Orig. art. has: 3 figures, 10 graphs and 2 tables. Card 1/2

L 1205-66

ACCESSION NR: AP5025841

2

ASSOCIATION: Intreprinderea Electromotor (Electromotor Enterprise) *UH*

SUBMITTED: 02Dec64

ENCL: 00

SUB CODE: EE

NR REF SOV: 000

OTHER: 005

JPRS

*Mello*  
Card 2/2

RUMANIA

616.981.49-022.362+036.21

POP, Carmen, Dr, and CRACIUNESCU, Viorica, Dr. Work performed at the State Health Inspectorate of Crisana Regiune (Inspectoratul Sanitar de Stat al Regiunii Crisana).

"An Episode of Mass Carriers with Salmonella."

Bucharest, Microbiologia, Parazitologia, Epidemiologia, Vol 11, No 6, Nov-Dec 66, pp 559-562.

Abstract: In the course of a series of 7,312 bacteriologic tests during the season of high enterobacterial infectivity (June -August) in Oradea, 287 asymptomatic carriers of *Salmonella anatum* were discovered, as well as 78 carriers of *S. typhimurium* and 15 of *S. enteritidis* Gaertner. Epidemiological and laboratory studies implicated especially milk and dairy products in the spread of *S. anatum* infection.

Includes 3 tables and 4 Rumanian references.

GRACIUNOIU, V.: ENACHESCU, P.

Steering schemes for pressing machines.

p. 86  
Vol. 4, no. 2, Feb. 1956  
ELECTROTEHNICA  
Bucuresti

SO: Monthly List of East European Accessions (EEAL), IC, Vol. 5, no. 12  
December 1956

POPOVICI, Alex, ing.; TATU, Gheorghe, ing.; NICOARA, Pavel, ing.;  
BABUTIA, Ion, ing.; CRACIUNESCU, Victor, ing. (Timisoara)

On the reduction of supplementary no-load losses in  
asynchronous motors. Electrotehnica 12 no.5:166-171 My'64.

1. Director, "Electromotor" Enterprise, Timisoara (for  
Popovici). 2. Assistant Chief, "Electromotor" Enterprise,  
Timisoara (for Tatu, Nicoara). 3. Head of the  
Laboratories, "Electromotor" Enterprise, Timisoara  
(for Babatia). 4. Assistant Chief Designer, "Electromotor"  
Enterprise, Timisoara (for Craciunescu).

CRAEMER, H.

Applied Mechanics Reviews  
June 1954  
Structures

② *in title* 01777. Craemer, H., Theory of plasticity in reinforced concrete (Teorija plastičnosti u armiranog betona), Belgrad, Izdat. Vredux. Minist. Gradjevn., 1951, 300 pp.

In many countries the methods for determining dimensions of cross sections for reinforced-concrete constructions are changing from those of the theory of elasticity ("n" method of admissible tensions) to methods resting on the plastic behavior of steel and concrete in method free from "n" rupture. The improvements and timeliness of this book are, therefore, not to be doubted.

Author gives a clear and comprehensive summary of the fundamental laws proving the validity of this form of calculation. The load capacity on the various types of loading and the degree of safety are carefully discussed on the basis of results given in the earlier chapters. At the end of the book, auxiliary tables for the determination of cross-section dimensions are given.

A chapter treats the load capacity of statically indeterminate systems (beams, girder grillages, frames, and arches); another deals with crosswise reinforced slabs and flat slabs. Methods are developed which enable more rapid calculation than is possible with methods based on the theory of elasticity.

The reviewer believes that constructions calculated by these methods show a more uniform degree of safety in all their parts than those calculated with "admissible tensions."

The book has a valuable bibliography of about 100 titles. Reading the book will be profitable not only for students but for civil engineers as well, since the author deals with numerous specific design cases.

G. Brandes, Germany

CRAEMER, H.

"A Remark on the Critical Boundary Pressure in Soil Mechanics" p. 389  
(Acta Technica, Vol. 5, No. 3, 1952, Budapest)

SO: Monthly List of East European Vol. 3, No. 3 1954  
Accessions / Library of Congress, March 1953, Uncl.

HUNG

113/116

539.31 :624.072.2

Fallacies and Paradoxes in the  
Plasticity Theory (In English)

Acta tech. hung.

10,73-82

1954

Hungary

H. GUNDESR  
It is stated that the curves representing relations between  
(i) tensile stress and strain (ii) bending load and edge  
strain and (iii), load and deformation in bending are often  
confused. Plastic hinges below single loads can be correctly  
interpreted if the load is assumed to be over a small, finite  
length. Compatibility conditions are valid for any stress-  
strain law. In statically indeterminate structures full  
plastication occurs simultaneously in all highly stressed  
sections and at this stage equalization of moments can occur.  
Applications to beams

*[Handwritten signature]*



RUMANIA

576.858.5

DUCA, M., ALEXANDRESCU, M., RADU, C., HANDRACHE, L. and CRAESCU, D., of the Medical Institute (Institutul de Medicina), Iasi.

"The Morphological Study of the Synthesis of Type 7 Adenovirus in HeLa Cells."

Bucharest, Studii si Cercetari de Inframicrobiologie, Vol 17, No 4, 66, pp 303-305.

Abstract: In a study of the sequence of nuclear changes produced by type 7 adenoviruses in HeLa cells in order to determine the relations between viral protein and mature viruses, the authors were unable to find any evidence of protein crystals. They suggest that this may be due to uniform dispersal of the proteins or to the fact that under the experimental conditions used the viral infection did not lead to the formation of protein crystals.

Includes 21 figures and 8 references, of which one German and 7 English-language.

1/1

STEINBACH, M.; LAZAROVICI, Miriam; ILIE, G.; FODORAN, Ana; NEDELESCU, Raisa;  
CRAESCU, I.; BALANESCU, G.

Physico-chemical composition, fatty acid content and therapeutic value of some vegetable oils, fish oils and marine mammal oils of our country. Stud. cercet. med. intern. 5 no. 5:555-566 '64

1. Institutul de medicina interna al Academiei Republicii Populare Romine si Ministerul Sanatatii si Prevederilor Sociale (for Steinbach, Lazarovici). 2. Institutul de cercetari alimentare al Ministerului Industrii Alimentare (for Ilie, Fodoran, Nedeleacu, Craescu, Balanescu).

CRAESCU, V.

Considerations in regard to the productivity in the field of motor truck transportation. p. 299.

(REVISTA TRANSPORTURILOR. ROMANIA. Vol. 3, no. 8, Aug. 1956.)

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

GRĂNESCU, V.; GUTTMAN, I.

Some considerations on the problem of profitability in public air transportation.

P. 27 (REVISTA TRANSPORTURILOR) (Bucuresti, Rumania) Vol. 4, no. 12. Dec. 1957

30: Monthly Index of East European Accessions (EMAI) LC Vol. 7, No. 5. 1958

I 34946-66 T/EMP(t)/ETI IJP(c) JD/DJ

ACC NR: AP6026645

SOURCE CODE: RU/0017/66/000/001/0005/0008

AUTHOR: Dragan, I. (Doctor; Engineer); Novac, S. (Engineer); Crafti, A. (Engineer)

ORG: Metallurgical Research Institute (Institutul de cercetari metalurgice)

TITLE: Some considerations concerning the hot deformability characteristics of noncorrosive steels

SOURCE: Metalurgia, no. 1, 1966, 5-8

TOPIC TAGS: corrosion resistant steel, plasticity, material deformation, mechanical shock resistance

ABSTRACT: A report on tests to determine hot deformability characteristics of non-corrosive steels. The most appropriate method to determine cold-hardenability of steel has been found to be shock upsetting; to determine plasticity hot torsion gave best results, while the upset method was best for determining shock-deformation resistance. Orig. art. has: 14 figures and 1 table. [Based on authors' Eng. abst.] [JPRS: 36,646]

SUB CODE: 11, 20 / SUBM DATE: none

Card 1/1

UDC: 669.14.018.7:539.32

0916 23.22

HUICA, I.; BICLESANU, V.; GRAHMALIUC, G.; GHIU, T.; OPREA, M.; POPA, S.

On the age of the broken stones at Schela-Bumbesti Jiu-Arseni  
(northwest of Getic Depression). Dari seama sed 49 pt. 2.:113-117  
'61-'62 [publ. '64]. (MIRA 17:11)

1. Submitted March 10, 1962.

COUNTRY : ROMANIA  
CATEGORY : Cultivated Plants - Industrial, Oleiferous, Sugar. M  
REF. NO. : SSBio21, No.14, 1958, No.83543  
AUTHOR : Graicu, E.  
INST. : -  
TITLE : The Effect of Organic and Mineral Fertilizers on the Growth of Mulberry Seedlings.  
ORIG. PUB. : An. Inst. cercetari agron., 1957, 24, No. 5, 603-623  
ABSTRACT : Experiments were conducted in 1951-1954 at the periculture station in Orsoev (Ivishchanskaya oblast', RFR). The soil in the mulberry nurseries contained little humus and available nutrients. P, Naa, K<sub>2</sub> and rotted manure were applied. Fertilizers were applied in different periods. On the soils under consideration, mulberry responded well to all fertilizers. The best results were produced by large doses of fertilizers. Fall application of manure with deep plowing-under in the amount of 40-60 t/ha was the most favorable one for the development of the plants. Application of N 240 and PK produced an effect equal in action to 40 t/ha of rotted manure. — A. M. Smirnov

Card: 1/1

CRAESCU, V.

Improvement of technical and economic indexes of the new flight material for Rumanian transport aviation. P 214.

REVISTA TRANSPORTURILOR. (Asociatia Stinitifica a Inginerilor si Technicienilor din Romania si Ministerul Transporturilor Rutiere, Navale si Aeriene) Bucaresti, Romania. Vol. 6, no. 5, May 1959.

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

Uncl.



CRAESCU, V., ing.

Motorcar transportation cost price as influenced by the  
practicability conditions of roads and the transport mean  
distance. Pt. 2. Rev transport 8 no. 3 106-110 Mr '61.

R/003/62/013/011/001/002  
D272/D307

AUTHOR:

Niederkrön, I., Grain, Viorica and Nicu, Iulia

TITLE:

Advanced purification of  $SiI_4$

PERIODICAL:

Revista de Chimie, no. 11, 1962, 648-652

TEXT:

The purification of  $SiI_4$  by recrystallization from n-heptane, was examined in detail.  $SiI_4$  was synthesized directly from the elements at  $650^{\circ}C$ . It was established that the majority of the impurities in crude  $SiI_4$  were concentrated on the residue of silica gel which was separated by hot filtration. A method was developed which permitted an advanced purification of the  $SiI_4$  by the introduction of wet silica gel into the n-heptane solution, or by the formation of the gel in situ when wet  $N_2$  was bubbled through the solution. The latter method was to be preferred because no additional impurities were introduced and because bubbling accelerated the dissolution and homogenization of the solution. It was found that 2 g silica gel per liter of n-heptane was sufficient for a good purification, and that no special control was necessary in the case of  $N_2$  bubbling. The

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Advanced purification of  $\text{SiI}_4$

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purity increased when the molar ratio  $n$ -heptane to  $\text{SiI}_4$  was raised from 1:1 to 8:1, but 5:1 was sufficient from the practical point of view. Two cycles of reerystallization were necessary for a purification below  $10^{-4}\%$  for each element; further cycles might yield higher purities though the spectral analytical method employed was not sufficiently sensitive to detect these. Duration of the purification cycle was determined primarily by the duration of dissolution of  $\text{SiI}_4$  in the boiling  $n$ -heptane. The yields were 86% at 5:1 and 80% at 8:1. There are 6 tables.

2/2

CRAIFALEANU, D.

Longitudinal vibrations of a prismatic rod resting on springs.

p. 34 (Metalurgia Si Constructia De Masini. Vol. 9, no. 9, Sept. 1957. Bucuresti, Rumania)

Monthly Index of East European Accessions (EEAI) IC. Vol. 7, no. 2, February 1958

S/137/62/000/012/037/085  
A006/A101

AUTHORS: Buzdugan, Gheorghe, Craifăleanu, Dionisie, Antonescu, Veronel,  
Pană, Tona, Postelnicu, Vasilica

TITLE: The effect of notches at high temperatures

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 12, 1962, 61 - 62,  
abstract 121368 ("Bul. Inst. politekhn. București", 1961,  
v. 23, no. 3, 101 - 113, German; summaries in Russian,  
English and French)

TEXT: The effect of notches and stress concentrators upon  $\sigma_b$  at elevated temperatures was investigated on OLC50, OLC45 and OLC 60 steel grades, corresponding to Soviet steels 5,45 and 60. The radius of stress concentrators on tensile specimens was 0.8; 1.6; 3.2; 4.8, and 6.4 mm and the ratio of the radius to the specimen diameter in the concentrator spot was  $r/d = 0.1; 0.2; 0.4; 0.6, \text{ and } 0.8$ . The specimens were tested at  $20^\circ\text{C}$  and at  $150 - 500^\circ\text{C}$  every  $50^\circ$ . It was established for OLC50 steel that  $\sigma_b$  increased initially with higher temperature, attaining maximum values at  $200^\circ\text{C}$  and decreasing rapidly at  $> 300^\circ\text{C}$ . For OLC45 and OLC 60 steels,  $\sigma_b$  decreased initially with elevated temperatures and then increased,

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The effect of notches at high temperatures

S/137/62/000/012/037/085  
A006/A101

attaining maximum values at 300°C, and furthermore decreasing rapidly. The temperature dependence of  $\sigma_b$  in specimens with stress concentrators is analogous to the temperature dependence of  $\sigma_b$  in smooth specimens. With decreasing  $r/d$ ,  $\sigma_b$  increases in notched specimens at the given temperature. To evaluate the effect of stress concentrators, the concentration coefficient  $\delta$  was introduced which is equal to the ratio of  $\sigma_b$  of a specimen with a stress concentrator to  $\sigma_b$  of a smooth specimen. With increasing  $r/d$ ,  $\delta$  decreases at all the temperatures. The temperature dependence of  $\delta$  is plotted according to which  $\delta$  varies within a comparatively narrow range ( $\pm 10\%$ ) for the given  $r/d$ . It is pointed out that in tensile tests at elevated temperatures stress concentrators exert a positive effect, raising  $\sigma_b$  of steel.

A. Belinkiy

[Abstracter's note: Complete translation]

Card 2/2

VOINEA, Radu; CRAIFALEANU, Cloniale

Critical speed of shafts. Rev mee appl 9 no.4:843-850 '64.

1. Corresponding Member of the Rumanian Academy (for Voinea).
2. Polytechnic Institute, Bucharest (for Craifalesnu).

CRAIESCU, V.

Scientific research, a decisive factor in aeronautic progress in the USSR.  
p. 487.

REVISTA TRANSPORTURILOR. (Asociatia Stiintifica a Inginerilor si Tehnicienilor  
din Romina si Ministerul Transporturilor Rutier, Navale si Aeriene) Bucuresti,  
Rumania. Vol. 6, no. 11, Nov. 1959.

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

Uncl.



VOINEA, R.; CRAIFALEANU, D.

On the critical revolutions of the shaft. Studii cerc nec  
apl 15 no.2:297-304 '64.

1. Corresponding Member of the Rumanian Academy (for Voinea).
2. Polytechnic Institute, Bucharest (for Craifaleanu). Submitted  
October 11, 1963.

CRAIG, G; CISLER, W; CAMPBELL, F.

Optimum investment in electric power for economically under-developed countries  
p. 541

TEHNIKA (Savez inzenjera i tehnicara Jugoslavije) Beograd, Yugoslavia.  
Vol. 14, no. 4, Apr. 1959

Monthly List of East European Accession EEAI LC, Vol. 8, no. 6, June 1959  
Uncla.

BERNTHAL, I.; ROMAN, Elisabeta; WAVEPNIA, Ed.; GEAPRAZ, Natalia;  
CRAINIC, Karin; GIOBANU-MAGIARI, Mariana

Poisoning with "rogor". Experimental study. Stud. cercet. fiziol.  
10 no.1:65-74 '65.

GRAINICEANU, Al.

Investigations of the action of sex hormones on the digestive tract.  
Therapeutic deductions. Stud. cercet. endocr. 13 no.5:643-649 '62.  
(SEX HORMONES) (GASTROINTESTINAL SYSTEM)

GRAINICEANU, Al.; COVASNEANU, Zenobia; STRUNOARU, Gr.; SUCMANSCHI, Maria

Action of insulin upon the cholinesterase and the muscular reactivity.  
Studii cerc fiziol 5 no.2:405-409 '60. (EEAI 10:2)

1. Institutul de fiziologie normala si patologica "Prof. Dr.  
D.Danielopolu" al Academiei R.P.R.  
(INSULIN) (CHOLINESTERASES) (MUSCLES)

CRAINICEANU, P.

"What is gliding and how is it done? P.18." AVIATIA SPORTIVA. Vol. 4, no. 2, Feb. 1953, Bucuresti, Rumania.

S0: Monthly List of East European Accessions, L.C. Vol. 2, No. 11, Nov. 1953, Uncl.

GRAINICEANU, P.

"The first glider flights; training to obtain the 'A' certificate." p. 8. (Aviatic Sportiva, Vol 4, No.5, May 1953, Bucuresti).

SO: Monthly list of East European Accessions, Vol3 No.2 Library of Congress Feb 54 Uncl

CRAINICIANU, P.

"Higher training in gliding." p. 20 (Aviatia Sportiva, Vol. 4 No. 8 Aug 1953, Bucuresti)

SO: Monthly List of East European Accessions, Vol.3 No.2 Library of Congress Feb 54 Uncl



GRAINICEANU, P.

"Knowledge of Aeronautic Psychology; Emotion." P. 7. (AVIATIA SPORTIVA,  
Vol. 5, No. 1, Jan. 1954, Bucuresti, Rumania.)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4,  
No. 1, Jan. 1955 Uncl.

*Crainicescu, E*

IAGNOV, S.; DUMITRESCU, Mircea; CUCU, N.; GRAINICESCU, E.

Hematopoesis after gastrectomies. Probl. ter., Bucur. 3:  
69-91 1956.

1. Membru corespondent al academiei R.P.R. (For Iagnov)  
(GASTRECTOMY, complications  
disord. of hemopoiesis, evolution)  
(HEMOPOIESIS  
disord., post-gastrectomy)

CRAIOVEANE, D.

CRAIOVEANE, D. Airplane models of great speed. p. 25  
Manly bravery prepared in a test tube. p. 27.

Vol. 1, no. 11 Nov. 1955

ARIPILE PATRIEI

TECHNOLOGY

Eucuresti, Rumania

S6 : Eastern European Accession Vol. 5 No. 4 April 1956

CRAIOVEANU, G.

"Micromodel for Performances." P. 19. (AVIATIA SPORTIVA, Vol. 4, No. 12, Dec. 1953, Bucuresti, Rumania.)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4, No. 1, Jan. 1955, Uncl.

CRAIOVEANU, G.

"Importance, Classification, and Role of Control Instruments." P. 23, (AVIATIA SPORTIVA, Vol. 4, No. 12, Dec. 1953, Bucuresti, Rumania.

SO: Monthly List of East European Accessions, (REAL), LC, Vol. 4, No. 1, Jan. 1955, Uncl.

CRAIOVEANU, G.

"Soverth" Progressive Parachute." P. 25, (AVIATIA SPORTIVA, Vol. 4, No. 12,  
Dec. 1953, Bucuresti, Rumania.)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4, No. 1,  
Jan. 1955, Uncl.

CRAIOVEANU, G.

"From 100 to 200 Kilometers Per Hour." P. 4. (AVIATIA SPORTIVA, Vol. 5, No. 1, Jan. 1954, Bucuresti, Rumania.)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4, No. 1, Jan. 1955 Uncl.

CRAIOVEANU, G.

Fuel for motors of model airplanes. p. 23.  
ARIPILE PATRIEI, Bucuresti, Vol. 1, no. 6, June 1955.

SC: Monthly List of East European Accessions, (EEAL), LC, Vol. 4, no. 10, Oct. 1955,  
Uncl.



CRAIOVEANU, G.

CRAIOVEANU, G. On the path of progress. p. 21. ARIFILE PATRIEL. Bucuresti, Rumania.

SOURCE: East European Accessions List (EEAL) LC, Vol. 5, no. 6, June 1956

CRAIOVEANU, G.

Diesel engines for airplane models. p. 19.  
(ARIFILE PATRIEI. Vol. 3, no. 2, Feb. 1957. Fatherland)

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

Page 79

MURGOCT, C., dr.; BERCU, G., dr.; DUMITERSCU, Cr., dr.; CRAISENG, C., dr.

The familial factor in Marfan's syndrome ( Apropos of 9 cases  
observed in 3 generations of the same family). Med. intern.  
(Bucur.) 16 no.11:1367-1375 N '64

1. Lucrare efectuate in Sectia de boli interne a Spitalului  
Rimnicu Sarat.

FIRU, P., conf.; DIACONESCU, M., dr.; CRISTEA, M., dr.; GHERGA-NEGREA,  
Adina, dr.; CRISTEA, Iulia

Various stomatological aspects of rickets in preschool children.  
Stomatologia (Bucur) 12 no.2:139-148 Mr-Ap'65.

1. Lucrare efectuata in Clinica de stomatologie infantila  
Institutul medico-farmaceutic, Bucuresti (seful clinicii:  
conf. P. Firu).

CRAIU, G.

Considerations on the characteristics of decomposition of acetylene. Rev chimie Min petr 13 no.12:729-734 D '62.

CRAIU, C., ing.

Application and calculation of vortex-breaking stirrer of the  
Inhauler type. Rev chimie Min petr 12 no.10:609-613 0 '61.

GRAIU, Ion; COMISIONERU, B.

Formation of pecuniary accumulations and their utilization for the development of technical and material bases of socialism. Probleme econ 15 no.12:166-181 D '62.

1. Adjunct al Ministrului Finantelor (for Graiu).

CRAIU, G.

Road to the development of amateur-radio work. Tr. from the Rumanian. p. 12.  
(RADIO I TELEVIZIIA, Vol. 6, no. 6, 1957, Sofia, Bulgaria.)

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, no. 12, December 1957 Uncl.



NITESCU, I.I., prof.; GRAIU, Rodica; WASSERMANN, N.

Cyanides and anti-cyanides. The action of sodium tetrathionate as an antidote in hydrocyanic poisoning. Rumanian M Rev. no.1:203-203 Ja-Mr '61.

1. Laboratory of Physiology of the Medicopharmaceutical Institute, Bucharest.

(HYDROCYANIC ACID toxicology)

(CYANIDES antagonists)

COUNTRY:	: Rumania	H-26
CATEGORY	:	
ABS. JOUR.	: <u>RZhim., No. 5 1960, No.</u>	19724
AUTHOR	: <u>Craiu, V., Anghel, P., and Burnei, M.</u>	
INST.	: Not given	
TITLE	: The Production of Sorbitol by the Electrolytic Reduction of Glucose	
ORIG. PUB.	: Rev Chim, 9, No 7-8, 447-450 (1958)	
ABSTRACT	: The electrolytic process for the production of sorbitol has been investigated. A flow sheet for the process is given and conditions for its operation are described. The effect of the nature of the cathode, temperature, and current density on current efficiency and yield of product has been investigated. Optimum reduction conditions have been determined, assuring 50-60% current efficiencies and 98% product yields. The advantage of the electrolytic process for the production of sorbi-	
CARD:	1/2	

18.0010

also 1273,1087

85171

R/003/60/011/007/001/003  
A125/A026

AUTHORS: Călușaru, A., Engineer; Craiu, Viorica, Engineer; Anghel, Paula, Engineer, Candidate of Technical Sciences

TITLE: On the Electrolytic Production of Metallic Titanium

PERIODICAL: Revista de Chimie, 1960, Vol. 11, No. 7, pp. 384 - 390

TEXT: Subject article deals with the electrolytic production of titanium. First, the authors present a brief historical review on various methods of electrolysis, i.e., the electrolysis of molten oxides, the electrolysis of molten titanium halogenes, and the electrolysis of molten titanates, and list the following scientists, who were engaged in the development of one or the other method: Borchers and Huppertz; Skliarenko and Lipkes (Ref. 3); Sibert, McKenna, Steinberg and Wainer; Hatschek (Ref. 2); Kratky and Bruchner; Fischer and Dorsch; Cordner and Worner; Okada and Kawane; Topinka and his co-workers; Burgess and Roberts; Brenner and Senderoff; Steinberg, Carlton and Wainer (Ref. 12). The last four scientists conducted a detailed study on the electrolysis of potassium fluotitanate (Ref. 12). Subject experiments refer to the production of metallic titanium by the electrolysis of potassium fluotitanate, dissolved in

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R/003/60/011/007/001/003  
A125/A026

On the Electrolytic Production of Metallic Titanium

sodium chloride molten in a protective atmosphere of argon ( $K_2TiF_6 - NaCl$ ). The laboratory apparatus consists of: a) the argon purifying installation, and b) the electrolysis cell. The argon purifying installation is used for the removal of noxious impurities, i.e., oxygen, nitrogen and water. The electrolysis cell consists of the cell itself and the heating furnace. The operation temperature ranged from  $700^{\circ}C$  to  $820^{\circ}C$ , with  $760^{\circ}C$  as the most efficient temperature. The current intensity varied from 10 to 30 amp, and the current density from 120 to  $750 \text{ amp/dm}^2$ . The voltage on the plugs of the cell was 5 - 6 v. Table 1 presents the values of the intensity and voltage in function of the time. The electrolysis procedure lasted 1 - 2 h and the cooling procedure 2 h. The deposited titanium was introduced into distilled water of  $60^{\circ}C$  maximum, where the salt content of the deposited metal was dissolved. The drying was performed in a vacuum at a temperature lower than  $60^{\circ}C$ . Coal, oxygen and iron are impurities which are present in larger quantities. Reference is made to the source of these impurities and to some methods of reducing them. The "Debyeogram" (Fig. 8) performed on a laboratory sample shows that this sample has parameters which are very close to the parameters of a product with a purity of 99.9%, indicated in technical literature. Table 3 presents some values computed on the basis of the "Debyeogram" and compared with some values of usual titanium and 99.9% pure tita-

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85371

R/003/60/011/007/001/003

A125/A026

On the Electrolytic Production of Metallic Titanium

nium, respectively. The current efficiency during the electrolysis varied between 45 and 75%, and the power consumption was around 26 kwh/kg of titanium. There are 4 figures, 5 photos, 1 set of photos, 3 tables and 12 references: 5 Soviet, 1 Rumanian, 4 English, 1 German and 1 Hungarian.

X

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85172

R/003/60/011/009/001/002  
A125/A026

18.0010 cl. 1273, 1087

AUTHORS: Craiu, Viorica; Anghel, Paula; Călusaru, A. - Engineers

TITLE: Electrolytic Production of Zirconium Metal ✓

PERIODICAL: Revista de Chimie, 1960, Vol. 11, No. 9, pp. 509 - 514

TEXT: Subject article deals with the method of electrolysis for the production of pure zirconium metal. Its production was studied by Troost; Marden and Rich; Driggs and Lilliendahl; Kroll and assistants; Steinberg and assistants (Ref. 2); Creamer, Chambers and White; Raynes, Thelleman, Steinberg and Wainer (Ref. 3); Anchioux and Dauphin; and Chauvin, Coriou and Huré (Ref. 4). In a previous work (Ref. 5) the authors published some experimental data on the electrolytic deposition of titanium metal. The data presented in subject article were obtained in the same apparatus (Figs. 1 and 2). The experimental procedure is based on the electrolysis of potassium fluozirconate, dissolved in molten sodium chloride. The authors studied the influence of the following parameters on the efficiency of substance and current: a) current density; b) temperature; c) composition of the electrolyte; d) electrolysis time; e) shape of the cathode; and f) nature of the cathode. a) The current density has a complex influ-

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A125/A026

Electrolytic Production of Zirconium Metal

ence depending on the interval of the current density at which the work is performed, on the dimensions and the shape of the cell and on the dimensions of the cathode. A high current density proved to be advantageous (Table 1). b) Influence of temperature (Table 2): A temperature of 800°C represents a minimum value. By increasing it to 850°C, the deposition procedure is improved. Above this temperature, the variations are smaller. Thus, 850°C are the maximum limit. c) Influence of the composition of the electrolyte (Table 3): Practically, it proved to be advantageous to select a ratio of  $K_2ZrF_6/NaCl$  equal to 1/2. d) Influence of the electrolysis time (Table 5): The most advantageous electrolysis time was found to be 2 - 2.5 h. e) Shape of the cathodes (Table 6): Only cylindrical and truncated cone-shaped cathodes were tested, but they proved to be identical in their efficiency. f) Nature of the cathodes: With regard to the current efficiency, the nature of the cathodes has no influence on the procedure, but influences the purity of the product. Steel and graphite cathodes have been excluded. Comparing a "V2A" cathode with a nickel cathode, the iron content of the zirconium produced was by 0.5% higher in case of the "V2A" cathode. Molybdenum cathodes are too expensive. The electrolytic zirconium was analysed spectrographically to establish the content of Cr, Cu, Mn, Sn, Al, Si, Fe and Hf. Ni and Ca could not be found. The spectrographical analysis was accomplished


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A125/A026

Electrolytic Production of Zirconium Metal

together with the Physicist M. Sterghiu. The iron content of about 0.1% was accurately determined by chemical analysis. It is possibly due to the steel lining of the electrolytic cell. The content of hafnium, being approximately 0.01% does not modify the properties of zirconium. After an X-ray examination, no gaseous impurities were found. Table 7 presents the Debyeograms performed by the Physicist A. Ciocanel. There are 7 tables, 2 photographs and 9 references: 4 Soviet, 1 Rumanian, 2 English, 1 French and 1 Hungarian.



Card 3/3



5.2400

27000 R/003/61/012/003/001/004  
D238/D302

AUTHORS: Niederkorn, I., Engineer, Candidate of Technical Sciences,  
Creanga, O., Engineer, Craiú, V., Engineer, Burnei, N.  
and Nicu, I., Engineers

TITLE: Manufacture of high-purity Si by means of the  $\text{SiJ}_4$  method

PERIODICAL: Revista de chimie, v. 12, no. 3, 1961, 137-143

TEXT: The aim of this work is to provide the necessary technological data for producing transistor grade Si. The  $\text{SiJ}_4$  method was chosen because of the efficient means available for purifying the intermediate. Specifically, this method comprises 3 steps: (a) Synthesis of  $\text{SiJ}_4$ .  $\text{J}_2$  (99.8% pure) and Si (99.9% pure, obtained by treating a commercial grade with HCl and HCl/HF) were directly combined in a laboratory scale apparatus similar to that of G.J. Szekely (Ref. 1: J. Electrochem. Soc. 1957, v. 104, 663). It consisted of a quartz  $\text{J}_2$  boiler, a vertical

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Manufacture of high-purity...

27000 R/003/61/012/003/001/004  
D238/D302

synthesis tube (quartz) and a  $\text{SiJ}_4$  receiver. The  $\text{J}_2$  vapors were produced by argon which was previously purified by passing it over  $\text{CaH}_2$  at  $350^\circ\text{C}$ .  $\text{CuO}$  at  $650^\circ\text{C}$ ,  $\text{Mg}(\text{ClO}_4)_2$  and  $\text{P}_2\text{O}_5$  and finally over glass spheres coated with silicon grease. The same installation was used also on a larger scale. The influence of temperature on purity and yield of  $\text{SiJ}_4$  was investigated at  $500\text{--}900^\circ\text{C}$ , using a charge of 100 g of  $\text{J}_2$  heated to  $190^\circ\text{C}$ ; 230g of Si packed in a column of 20 cm; 15 l/hr of argon; and a duration of synthesis of 2 hours. The optimum, attained at  $700^\circ\text{C}$  gave a yield of 98.8% of  $\text{SiJ}_4$  analyzing 5.16% Si,  $\sim 10\text{--}3\%$  Ca, Al and no Ti, Fe, Cu. The best  $\text{J}_2/\text{Si}$  ratio at this temperature was found by varying separately the temperature of the  $\text{J}_2$  boiler and the height of the Si column. The optimum combination was found to be  $190^\circ\text{C}$  and 20 cm respectively. (b) Purification of  $\text{SiJ}_4$ . (1) The crystallization of  $\text{SiJ}_4$  from n-heptane, using an 8-fold molar excess of solvent, proved satisfactory [Abstractor's note:

X

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27000

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D238/D302

Manufacture of high-purity...

Nature of the amelioration not clearly stated ] (2) Alternatively,  $\text{SiJ}_4$  was purified by distillation in an inert atmosphere. The charge of 2 kg heated in an air bath at  $315^\circ\text{C}$ , was distilled by means of a heated column made of quartz 1600 mm high and 30 mm wide, filled with Mo wire and provided with a magnetic reflux regulator. At a column temperature of  $305^\circ\text{C}$  a reflux ratio of 1/3 to 1/5 and a fractionation efficiency of 10 theoretical plates, a product was obtained, the middle fraction (60%) of which contains only  $10^{-8}\%$  B and  $10^{-4}\%$  Ca. The residue contained up to  $10^{-2}\%$  B. This enrichment is probably due to the formation of B-complexes. (c) Thermal decomposition of  $\text{SiJ}_4$  in vacuo.  $\text{SiJ}_4$  was charged through a side-arm into a 1 lit. quartz vessel heated by an oil bath. The vapors of  $\text{SiJ}_4$  passed into a horizontal "suprasil" quartz tube, protected by another quartz tube and heated to  $1050^\circ\text{C}$ . Silicon is compactly deposited on the "suprasil" tube, while the  $\text{J}_2$  vapors are subsequently trapped. The whole system was evacuated to  $5 \cdot 10^{-5}$  -  $1 \cdot 10^{-5}$

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Manufacture of high-purity...

27000 R/003/61/012/003/001/004  
D238/D302

Torr. Table 7 shows the relation of the yield of decomposition to the consumption of  $\text{SiJ}_4$ . A spectrally pure Si is obtained. Activation analysis showed up to  $10^{-5}\%$  of As, and Si from previously crystallized material contained only  $10^{-8}\%$  of B. There are 6 figures, 7 tables and 3 references: 1 Soviet-bloc and 2 non-Soviet-bloc. The references to the English-language publications read as follows: G. Szekely, J. Electrochemical Soc. 1957, nr. 11, vol 104, p 663; Lifton, F.B. Andersen, H.C. J. Electrochemical Soc. 1954, nr. 6, vol. 101, p.287; 1951. vol. 98, p.488. X

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(For Table 7 see next card)

NIEDERKORN, I.; CRAIU, Viories; NIGU, Iulia

Advanced purification of silicon tetraiodide. Rev chimie Min petr  
13 no.11:648-652 N '62.

CRAMARIUC, R.

On the Conservation of the Energy in a Medium With an Electromagnetic Viscosity

Rosman, Hugo; et Cramariuc, Radu. Sur la conservation de l'énergie dans les milieux à viscosité électromagnétique. Bul. Inst. Politehn. Iași (N.S.) 2(6) (1956), 49-52. (Romanian. Russian and French summaries)

3  
21

CIORASCU, F.; CRAMARIUC, R.; CROITORU, M.; CROITORU, P.; IONESCU, D.  
SEMENESCU, G.

Electrostatic generator with band. Studii cerc fiz 11 no.4:1033-1041  
'60. (EEAI 10:8)

1. Institutul de fizica atomica, Bucuresti. 2. Comitetul de redactie,  
Studii si cercetari de fizica, redactor responsabil adjunct (for  
Ciorascu).

(Electrostatic generators)

Card 1/1

JANOUSEK, inz.; BAUMGARTL, inz.; CRANDE, inz.

Dust removal from fumes in the electric power plant in Opatovice.  
Energetika Cz 11 no.10:499-500 0 '61.

1. Ctenove komplexni brigady zavodni odbocky Ceskoslovenske vedecko-  
technicke spolecnosti, Elektrarna Opatovice



Crapini, V.

COUNTRY	Romania
CATEGORY	Forestry, General Problems. K
ABST. JOUR.	Botanica, No. 4, 1959, No. 15453
AUTHOR	Chirita, Const.; D. Avram. Chr.; Coman, N.;
INST.	Acad. Sci. Romanian PR
TITLE	Investigation and Mapping of Forest Habitats.
ORIG. PUB.	Mul. stin. Acad. RPR. Ser. biol. si stiinta agric., 1956, 8, No. 4, 847-864
ABSTRACT	The number of basic taxonomic units necessary for the mapping of types of habitat are explained, and criteria are given for the determination and classification of habitats. Methods of mapping are offered with an estimated number of concrete taxonomic units taken in Romania. Results of mapping are considered for surfaces of 30 thousand hectares in the Eastern Carpathians, and an ecological scheme is presented for type of habitat in this region. — L.V. Neemelov
CARD:	1/1 * Decsi, P.; Crapini, V.; Malureanu, G.; Nicolae, V.; Patrascoiu, N.; Stanciu, G.

CRASNARU, N.

Inoxidable steels containing nitrogen. p. 7. TEHNICA NOUA.

(Asociatia Stiintifica a Inginerilor si Tehnicienilor) Bucuresti.

Vol. 3, No. 36, Feb. 1956.

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

CRASNARU, N.

The use of oxygen in siderurgy. p. 8.  
(TEHNICA NOUA. ROMANIA. Vol. 3, no. 57, July 1956.)

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

CRASNARU, P.  
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Source: Bucharest, Farmacia, Vol IX, No 9, Sep 1961, pp 563-571.

Data: "On the Extractive Solutions Included in the 7th Edition of the Rumanian Pharmacopoeia and Suggestions for the Next Pharmacopoeia."

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