Conference on tectonophysics. (Cont.)

49-7-13/14

TABLE BIR. BENESTER BESTER BESTER BESTER BESTER BIR BENESTER BENESTER BESTER B

in benzyl alcohol and it was proved that this plastic, optically active material is suitable for modelling tectonic processes. New instruments were demonstrated which were recommended for investigating physical properties of the materials of the models. N. V. Mikhaylov, Moscow Scientific Research Institute on Building (Moskovskiy Nauchno-Issledovatel'skiy Institut Po Stroitel'stvy) devoted his paper to investigating the physical and mechanical properties of those materials which are equivalent to rocks from the point of view of modelling For materials with crystallisation tectonic phenomena. and strong, "high structured" coagulation structures, he recommended determining of the curves of the kinetics of increase of the deformation with time when stressed with ϵ constant tangential stress and the drop in deformation after relieving the stress. Materials with low strength coagulation structures should be studied by recording the changes in tangential stress for a given constant deformation speed of the specimen. He described a new instrument. the electron-selsyn elastoviscosimeter which he designed Card 10/18 and some new methods of determining the coefficient of viscosity of the material.

CIA-RDP86-00513R000617810004-4" **APPROVED FOR RELEASE: 09/17/2001**

Conference on tectonophysics. (Cont.) 49-7-13/14

The following physicists dealt with the problem of modelling the tectonic phenomena: L. M. Kachanov, Ye. I. Edel'shteyn, G. V. Vinogradov, G. N. Kurznetsov, M. P. Volarovich, A. V. Stepanov and also the geologists F. I. Vol'fson, V. A. Aprodov, N. I. Borodayevskiy, Yu. S. Shikhin. It was mentioned that the fundamental difficulties in developing modelling techniques and defining more accurately the conditions of analogy are due to the inadequate knowledge of the physical and mechanical properties of rocks and that much attention should be paid in the near future to improving the theory and methods of modelling. The geologists mentioned that from the practical point of view the experiments with non-uniform models of sections of the ore fields are of greatest interest. In the resolution of the conference it was mentioned that it is possible in principle to simulate on models tectonic phenomena and that the work carried out in this field by the Geodynamics Section of the Institute of Physics of the Earth is promising.

Card 11/18

(Note: Up to this point this is a complete translation except for the initial introductory paragraph).

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R000617810004-4"

49-7-13/14 Conference on tectonophysics. (Cont.) The mechanism of formation of large structural elements of the Earth's crust was dealt with by the following V. V. Belousov (Institute of Physics of the Earth) mentioned the variety of reasons of fold formation and the necessity that in each concrete case the local causes of such a phenomenon should be investigated. He considered fold formation as a reaction of layered plastic strata to the differential vertical movements of the underlying blocks G. D. Azhgirey, Moscow State University (Moskovskiy Gosudarstvennyy Universitet) drew attention to the necessity of using extensively geological methods for detailed study of the long term history of formation of concrete structural elements of the Earth's crust. P. N. Kropotkina, Institute of Geological Sciences (Institut Geologicheskikh Nauk AN SSSR) dealt with compression and stretching in the Earth's crust and possibilities of studying these phenomena. N. I. Nikolayev, Moscow Geological-Prospecting Institute Card 12/18 (Moskovskiy Geologo-Razvedochnyy Institut) considered the methods of studying the mechanism of formation of those

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R000617810004-4"

Conference on tectonophysics. (Cont.)

49-7-13/14

folds and fractures which developed in recent periods,
on the example of the ridges of Karatau in Southern

Verekhatan.

V. I. Keylis-Borok (Institute of Physics of the Earth)
V. I. Keylis-Borok (Institute of Physics of the Earth)
described the method which he developed for determining
the elements of location of fractures in the depths which
the elements of location of fractures in the depths which
bring about earthquakes and elucidated the direction of
displacement of their extremities. The resolution
emphasized the importance of the extensive study of the
emphasized the importance of the extensive study of the
deformation of the Earth's crust within individual large
deformation of the Earth's Crust within individual large
regions carried out by the Geodynamics Section of the
Institute of Physics of the Earth. A number of papers
were devoted to methods and tasks of detailed investigation
of tectoric fractures.

M. V. Gzovskiy proved the inconsistency of the hypothesis of G. Becker which is widely used by geologists for interpreting the fracture tectonics; he recommended use of a complex of modern conceptions on the strength of a complex which would permit to re-establish the basic materials which would permit to re-establish the basic features of the tectonic stress field acting during the time of formation of the cracks.

time of formation of the cracks.

1. P. Kushnarev and L. I. Lukin, Institute of Geology of Ore Deposits (Institut Geologii Mestorozhdeniy AN SSSR)

Gold Geological Prospecting Institute (Vsesoyuznyy Nauchno-Card 14/18 Issledcvatel'skiy Geologo-Razvedochnyy Institut Zolota)

CIA-RDP86-00513R000617810004-4 "APPROVED FOR RELEASE: 09/17/2001

2 - 1 | FELL MARE TROUBESTANDINGS ALLEGE FOR STREET HER PROPERTY OF A CO.

Conference on tectonophysics. (Cont.)

49-7-13/14

outlined those practical problems, for the solution of which

it is advisable to study the mechanism of formation of the structure of deposits of gold ores.

V. M. Kreyter, All Union Research Institute of Mineral Raw Materials (Vsesoyuznyy Institut Mineral'nogo Syr'ya)

formulated the problem of the influence of pressure from all sides on the character of the tectonic fractures and on the

crack distribution.

I. Z. Korin (Institute of Geology of Ore Deposits) demonstrated meterial indicating that the distribution of hypergenic deposits of iron, nickel and cobalt in the weathered crust depends to a large extent on the direction, density and character of the crack distribution and of the larger fractures in the basic rocks.

A. A. Belitskiy, Tomsk Polytechnical Institute (Tomskiy Politekhnicheskiy Institut) characterizes the complicated crack structure of coal bearing deposits on the example of

the Kuzbas.

G. V. Charushina, East Siberian Branch of the Ac.Sc. Card 15/18 (Vostochno-Sibirskiy Filial AN SSSR) analysed the method of studying fractures in shallow sedimentary rocks on the sample of the South Siberian platform, mentioning that in

> June June of the interpretation of fractures is inadequate and in some cases doubtful; in prospecting for

Conference on tectonophysics. (Cont.)

49-7-13/14

ores the mechanism and history of deformation of the investigated parts of the Earth's crust should be considered as one of the basic scientifically justified methods.

THE STORES OF THE STREET OF THE STREET CHARLES AND THE STREET OF THE STREET STREET STREET STREET STREET STREET

The problem of cleavage was extensively discussed by various authors. A. V. Pek, Novocherkassk Polytechnical Institute (Novocherkasskiy Politekhnicheskiy Institut) dealt with the method of microscopic investigation of the rock structure for elucidating the character of the investigated deformations (petrotectonic) and emphasized the practical importance of this method from the point of view of deciphering the structure of ore deposits in determining the displacements along large tectonic fractures and also in other cases. The various problems of the physical and mechanical study of tectonic deformation of rocks which are important from the point of view of engineering gedogy were considered by I. V. Popov, Laboratory of Hydrogeological Problems (Laboratoriya Gidrogeologicheskikh Problem AN SSSR). The problems of tectonophysical investigations relating to search for oil and gas with analysis of concrete examples were dealt with by Card 17/18 P. P. Ivanchuk, All Union Gas Research Institute (Vsesoyuznyy Nauchno-Issledovatel'skiy Institut Gaza). It was recommended

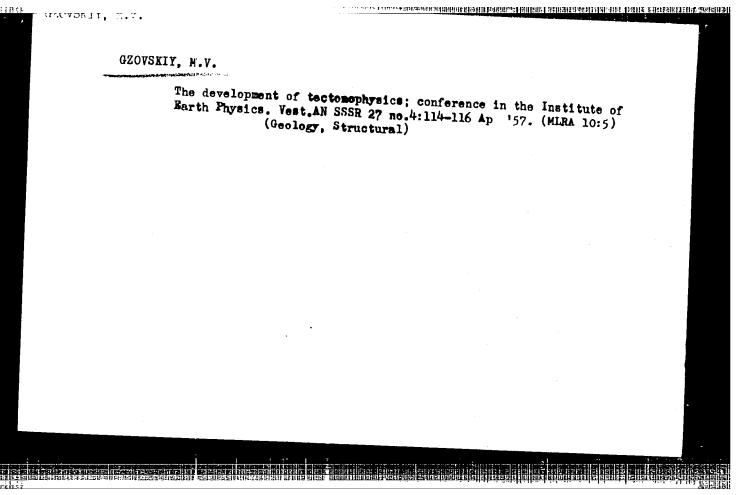
Conference on tectonophysics. (Cont.)

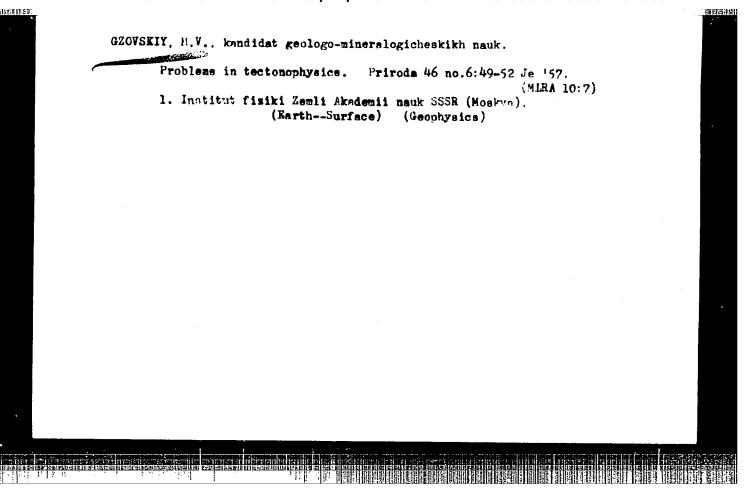
49-7-13/14

to organize a permanent tectono-physical seminary and the organization of such a seminary was entrusted to the Geodynamics Sections of the Institute of Physics of the Earth, Ac.Sc.

AVAILABLE: Library of Congress

Card 18/18





GZOVSKIY, M.V.

Modeling method in tectonophysics [with summary in English]. Sav.
geol. 1 no.4:53-72 Ap '58. (MIRA 11:6)

1. Institut fiziki Zemli AN SSSR. (Geological modeling)

S07/49-58-8-3/17

TILE THE SHERICH KOMBONISHER ER ER FRANKRIK BERKETIKE GROUPFINNES FRANK ET FIR FRANKE (FRANK) IN GERF FRANK

AUTHORS: Gzovskiy, M.V., Krestnikov, V.N., Nersesov, I.L. and

Reysner, G.I.

TITIE: Tectonic and Seismic Conditions of Carmskiy Rayon in

Tajik SSR (Sopostavleniye tektoniki - seysmionnost'yu

Carmskogo rayona Tudzhikskoy SSR.I) Fart I.

PERIODICAL: Izvestiya Akad mii Nauk SSSR, Seriya Geofizicheskaya,

1958, Nr 8, pp 959 - 976 + 2 plates (USSR)

ABSTRACT: A junction of the vast Asian mountain chains, Himalaya-

Pamir geosyndine and the T'len-Shan Range with the Tajik depression represents territory of very active seismic activities. Particularly, the Garmskiy rayon is known for its highest concentration of the encentres (Figures 1)

its highest concentration of the epicentres (Figures 1

The history of its alpine, tectonic movements and the formation of its geological structure can be represented

in the form of diagrams. The structural changes which were undergone during the periods of the Mesozoic and the Kainozoic in the eastern part of the region along the

line NW-SE are shown in Figure 2, while Figure 3

represents the same cross-section running through Garm-

Card1/5 skiy rayon.

Tectonic and Seismic Conditions of Garmskiy Rayon in Tajik SSR

Some of the data given in the diagrams were interpolated from the places situated farther away (Figure 4) but it was assumed that the possibility of error could not affect the general character of the graphs.

the general character of the graphs.

A clear difference in the tectonic movements between the geosyncline and the plateau areas can be clearly distinguished in Figures 5 and 6.

The present structure (Figure 7) of the Garmskiy rayon and NE part of the Tajik depression is characterised by several divisions of which the most important is the alpine district of Pamir and Darvaz.

A main feature of the structure of the Garmskiy rayon is a vertical displacement of the isolated blocks separated by the tectonic faults which break through the Earth's core. The traces of these faults can be found even in the Palacozoic base. A change occurred in their direction in comparison with that in the Neogen and Quaternay periods at the time when an inversion took place of the pre-Pamir depression and when the region of the Kabudkrin rose above the surrounding areas.

Card2/5 At the same period in the worth-west of the Kabudkrim

SOV/49-58-8-3/17

- TO SEE OF THE SECOND OF THE

Tectonic and Seismic Conditions of Garmsky Rayon in Tajik SSR

anticline, a series of faults developed, the depth of which is characterised by the long and narrow grabens filled with small rocks (Figure 1). These grabens could not be independent structures as those in other areas (Figure 7). It can be assumed that they are the remnants of the changed direction of the movements of neighbouring regions. Originally, a rise of one of the regions caused the formation of a fault. The faults, in turn, caused a break in the general movement of the area. Thus, at the boundary of two neighbouring tectonic regions, the faults can be found, usually at the narrow ridges (Figures 1 and 3). The formation of new faults in relation to the dislocations are explained by the faults being not vertical. They are mostly inclined towards its lifted side. A noticeable feature is a very well-maintained range of the young faults and folds of meogen-Quaternary origin. Their large number signifies a horizontally directed course of the tectonic regions. Also, it can be assumed from their general orientation that the shear effect was directed along the Meridian.

Card3/5 The Palaeozoic foundation of the Garmskiy rayon was effected

307/49-58-8-3/17

🕟 🕟 🕠 महत्त्वात्त्रमानायात्रमान्यः व्यवस्थत् वयाच्या छ तस्य स्वयास्यान्य । व्यवस्थान्य विकास्य कृतिस्य स्वयास्य स्यास्य स्वयास्य स्वयास्य

Tectonic and Seismic Conditions of Garmskiy Rayon in Tajik SSR

by both the strong, vertical forces and the weaker, horizontal shearing stresses, thus being subjected to a deformation which was of plastic character. This can be seen on the surfaces where the Palaexoic is found close to the Mesozoic rocks. Where this type of deformation occurred with great speed, the faults were formed. It could be said that all the blocks of Palaeozoic origin rigid bodies but as a plastic medium behaved not as with some parts of the Earth core being somewhat of greater viscosity in relation to the Mesozoic and the Tertiary sedimentations. The general character of the mechanism of formation of the alpine structure of the Garmskiy rayon could be also applied to the regions of Tajik depression (Figure o). It can be assumed that the developments in the Garmskiy rayon took place during the second half of the Quaternary period and lasted about 120-230 thousand years which can be compared with 600 thousand years of the total time of the Quaternary period.

Card 4/5

Tectonic and Seismic Conditions of Garmsky Rayon in Tajik SSR

There are 8 figures and 28 references, 25 of which are Soviet and 3 German.

ASSOCIATION: Akade

Akademiya nauk SSSR Institut fiziki Zemli

(Ac.Sc.USSR, Institute of Terrestrial Physics)

SUBMITTED:

August 28, 1957

1. Geology--USSR

Card 5/5

307/49 -58-12-1/17

्रमा १५ वर्षा वर

AUTHORS: Gzovskiy, M. V., Krestnikov, V. N., Nersesov, I. L., Reysner, G. I.

TITLE: Comparison between the Tectonics and Seismicity of Garmskiy
Rayon of Tadzhik SSR. II (Sopostavleniye tektoniki s seysmichnost'yu Garmskogo rayona Tadzhikskoy SSR. II)

PERIODICAL: Izvestiya Akademii Nauk SSSR, Seriya geofizicheskaya, 1958, Nr 12, pp 1425-1442 and 2 inserts (USSR)

l: It was observed that more than 9000 epicentres of the energy from 10⁴ - 10¹³ j showed activity during 1955 and 1956 in Garmukiy rayon of about 13 500 km² (Figs.2, 3 and 8). The ABSTRACT: earthquakes were registered in sufficient detail to give a complete picture of the seismicity of this region (Fig.1). This region, therefore, was chosen for the investigation on the relationship between seismicity and tectonic structure. A quantitative method of investigation was chosen so that the analysis of tectonics could be utilised in the determination of seismicity. The mean gradient of the velocity of vertical tectonic movements of the earth crust was calculated from . Eqs.(1) and (2). Some results are shown in Figs.4, 5 and 7 and Tables 1 and 2. The cross-sections I-I and II-II employed in the calculations can be seen in Fig.6. The comthe areas of higher parison showed that in Carmskiy rayon Card 1/3

SOV/ 49-58-12-1/17

Comparison between the Tectonics and Seismicity of Garmskiy Rayon of Tadzhik SSR. II.

seismic activity coincide with the banded structure, for which a mean gradient of tectonic movements in the Quaternary period was high (Figs.5 and 6). Therefore, it can be stated that the velocity of seismic activities increases with an increase of mean tectonic gradient. In order to verify this relation, a method was devised which could be applied to any region having seismic activity of short duration (2 to 3 years), provided weak esrthquakes and the measurable gradients of tectonic movements are of recent origin. This method is based on the detailed analysis which showed that the correlation between the frequency of earthquakes (Fig:1) and the tectonic gradient, Fig.6, is maintained in various areas of the Garm region (Table 3, A7 - frequency). As the above relation was found

for one region only, it is possible that some modifications Card 2/3

SOV/ 49 -58-12-1/17

- control of the resemble to the superior state of the 特別的

Comparison between the Tectonics and Seismicity of Garmskiy Rayon of Tadzhik SSR. II.

are necessary for the different tectonic structures or for various depths of the earth crust. Therefore, the investigations in this matter are not yet concluded and the additional information will be presented at some future date. There are 3 tables, 8 figures and 28 references, of which 23 are Soviet, 3 are German (2 translated from Hungarian), and 2 are English.

ASSOCIATION: Akademiya nauk SSSR, Institut fiziki Zemli (Academy of Sciences, USSR, Institute of Physics of the Earth)

SUBMITTED: August 4, 1958.

Card 3/3

A COLOR OF THE SECTION OF THE SECTIO

GZOVSKIY, Mikhail Vladimirovich; BELOUSOV, V.V., otv.red.; FEDOT'YEV, K.M., red.izd-va; MAKUNI, Ye.M., tekhn.red.

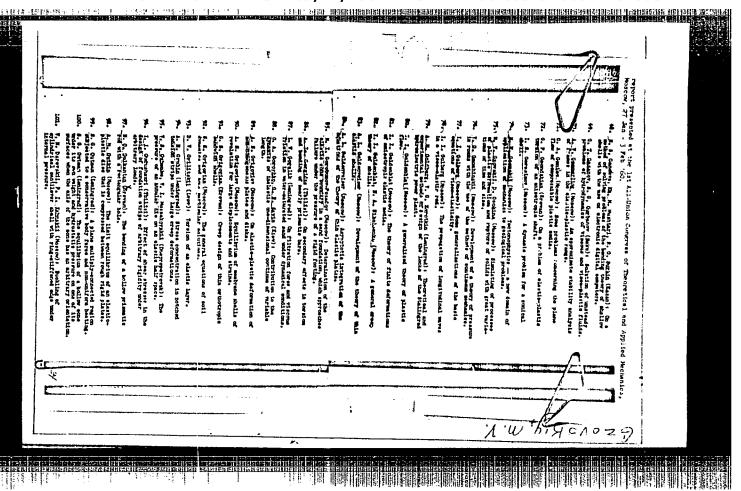
[Basic tasks in studying the formation dynamics and tectonics of the Baydzhansay anticline] Osnovnye voprosy tektonofiziki i tektonika Baidzhansaiskogo antiklinoriia. Moskva, Izd-vo Akad.nauk SSSR. Pts. 1 and 2. 1959. 254 p. (MIRA 12:7)

1. Rukovoditel' otdela geodinamiki Instituta fiziki Zemli AN SSSR (for Belousov).

(Kara Tau-Geology, Structural)

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R000617810004-4"

die 19g in postent parch.



Lexicand. Educative Lexicand.	<i>!</i>		<u> </u>	***************************************			<u></u> ;)) /.i	4 			·	j							
€ 28 28 28 28 28 28 28 28 28 28 28 28 28			•	11.2	Trasbeiry, T.J. Use of the Optical Method for Investigating Stress Middle Mar Mine Enterstions Middle Mar Mine Enterstions	Ogganing MI., D.S. Ospidas, and I.M. Engeters. Use of the Spried Polarization Webbod in the Similation of Geological Processes	VIII. INTESTIMETON OF MIXING AND GROUNDLY PROGRESS	Remodent endety, A.S. Reactic Equilibrium of an Anisotropic Flave With a furned Flactic Core	Exchang V.Te., Modeling Several Cases of Finatic Deformation of Metals in Polycrystalline Silver Chloride	Distilor, R.A. Orded Nethod for Investigating Scattelized States of Stress in Pine-Ordined Polyctystals	PRESENTANTA, FLAT, etc. Life, Schington, On the Use of Silver Chieride for Studying Plastic Petrastion Processes by Menns of the Optical Polarisation Nethol.	cal Pelarisation Nethed (Cont.)		problems and tree sethed the distribution of the settled problems or extends problems or extends of the settled problems or extends of the settled problems of the settled of photosoft the settled of photosoft the settled of photosoft the settled of photosoft the settled principle in the settled of the settled of photosoft the settled principle in the settled principle in the settled of the set	orminum: The collection contains reports presented at the contentence of the plants and extended in stress scalings be the february 10 - 20, 1956 the Prople's Language and attended by 20% delegates including representatives at the Expert of China. Prople's Prople's Prople's of China, the Polick Prople's Prople's Orman Democratic Republic, and the Republic of Careboslovation. The reports discuss greated theoretical	purpose: This collection of 56 articles is intended for scientics and expiners concerned with experimental evens unalysis of manino parts and scurrieral components.	Bert. 8.7. Shithobalov; M.: Te.V. Shicheslave; Fech. Ed.: 5.0. Vocaletane; Baiterial Board: 8.0. Octaur, L.N. Bacharov, V.N. Kresnov, T.D. Mehrstove, S.L. Prigorovskiy, V.M. Froshko, S.S. Rotszov, and Red. Edel'shippi.	Rigariasismo-optionally model isolatorative supremberly, trudy honferentally J-21 ferrilly 1978 gold (optical biariasion Method for Stees Andytis: framestone of the Conference of February 33-21, 1998). [Loningred] Ind-we framestone of the J-20, 1988 [Loningred] in the Conference of Tehrusy 33-21, 1998 [Loningred]. 2,500 copies printed leningredsings units, 1998. hgl p. Errate slip interest. 2,500 copies printed.	Satisfied. Biferritet	, ,	

BELOUSOV, V.V., red.; GZOVSKIY, M.V., kand.geol.-miner.nauk, red.; KOLOSHINA, T.V., red.izd-va; GUROVA, O.A., tekhn.red.

[Tectonophysics; transactions of the All-Union Conference on Tectonophysics] Problemy tektonofiziki; trudy Pervogo Vsesoiuznogo tektonofizicheskogo soveshcheniis. Pod red. V.V. Belousova i M.V.Gzovskogo. Moskva, Gos.nauchno-tekhn.izd-volit-ry po geol. i okhrane nedr, 1960. 363 p.

(MIRA 14:3)

1. Vsesoyuznoye tektonofizicheskoye soveshchaniye. lst. Moscow,
1957. 2. Chlen-korrespondent AN SSSR (for Belousov).
(Geology, Structural) (Geophysics)

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R000617810004-4"

PHASE I BOOK EXPLOITATION

SOV/5096

Bune, V. I., M. V. Gzevskiy, K. K. Zapol'skiy, V. I. Keylis-Borok, V. N. Krestnikov, L. N. Malinovskaya, I. L. Nersesov, G. I. Pavlova, T. G. Rautian, G. I. Reysner, Yu. V. Riznichenko, and V. I. Khalturin

Metody detalinogo izucheniya seysmichnosti (Methods of Detailed Seismic Research)
Moscow, Izd-vo AN SSSR, 1960. 327 p. No. of copies printed not given.
(Series: Akademiya nauk SSSR. Institut fiziki zemli. Trudy, vyp. 9 [176])

Resp. Ed.: Yu. V. Riznichenko, Corresponding Member AS USSR; Ed. of Publishing House: S. I. Mosarskiy; Tech. Ed.: O. G. Ul'yanova

PURPOSE: This book is intended for geophysicists, particularly seismologists.

COVERAGE: The book summarizes the principal results of the work of the TKSE Instituta fiziki zemli AN SSSR (Tadzhik Complex Seismological Expedition of the Institute of Physics of the Earth of the AS USSR) and the Institut seysmologii AN Tadzhikskoy SSR (Institute of Seismology of the AS Tadzhik SSR) during the period 1955-1957. Among the topics discussed are: seismic apparatus used, new methods for determining the coordinates of earthquake

Card 1/16

"APPROVED FOR RELEASE: 09/17/2001 CIA-F

CIA-RDP86-00513R000617810004-4

Methods of Detailed Seismic Research

SOV/5096

foci, detailed methods for determining the structure of the earth's crust, some results of these determinations, methods of determining seismic energy on the basis of a series of criteria, analysis of dominant frequencies, the use of frequency-selective apparatus, a general description and analysis of seismic conditions in the Garm and Stalinabad areas, the geological structure of the Garm region and the history of its development, and a comparison of the spatial distribution of seismicity and the geological and tectonic structure of the area. The Foreword mentions Academician G. A. Gamburtsev [deceased] who laid the foundations for this work when he was director of the TKSE. The individual chapters of the book were written by: Introduction and Chapter 1 -- I. L. Nersesov and Yu. V. Riznichenko; Chapter 2 -- I. L. Nersesov; Chapter 3 -- I. L. Nersesov and T. C. Rautian; Chapter 4 -- T. G. Rautian; Chapter 5 -- K. K. Zapol'skiy and V. I. Khalturin, Chapter 6 -- V. I. Keylis-Borok, L. N. Malinovskaya, G. I. Pavlova, and V. I. Khalturin; Chapter 7 -- V. I. Bune, I. L. Mersesov and Yu. V. Riznichenko; Chapter 8 -- M. V. Gzovskiy, V. N. Krestnikov, and G. I. Reysner; Chapter 9 -- V. I. Bune, M. V. Gzovskiy and I. L. Nersesov. There are 272 references: 185 Soviet, 73 English, and 14 German.

Card 2/16

THE STATE OF THE S

·	
Methods of Detailed Seismic Research sov	/5096
	239
5. Seismic regime of the Stalinabed region	239
- · · · · · · · · · · · · · · · · · · ·	242
	The state of the s
Study of change in time of the seismic region of the seismic reg	244
in the Stalinabad region	
Ch. 8. History of the Geological Development and the Present	247
Structure of the Garm Region 1. History of Alpine tectonic movements and the formation of	£ .
1. History of Alpine tectonic movements and one	247
the geological structure of the days a	249
Triassic and Jurassic	252
Cretaceous	253
Paleocene and Eocene	253
Oligocene and Neocene	256
Quaternary period :	_
a Aba Carm marion	262
2. Present structure of the Garm region	263
Internal structure of Paleozoic formations Form of the upper surface of Paleozoic formations	263
Form of the upper surface of	
Card 13/16	
44-4-7/10	
。	miss internated about heightigh

	2/5
Internal structure of Mesozoic and Tertiary deposits	265
Form of the upper surface of Mesozoic and Tertiary deposits	269 270
General arrangement of the present structure of the region	210
. Mechanism of the formation of the Alpine structure	274
Structural results of change in direction of the movement	
of tectoric zones	274
Indications of additional weak horizontal compression	276
Mechanism of fold formation	276
Formation of transverse faults	278
Form of tectonic zones	278
9. Seismicity of the Region and Its Comparison With the	
Structural Geology	279
. Map of epicenters	279
Method for drawing a map of epicenters	280
General characteristics of the composite map of epicenters	282
Comparison of the epicenter maps for 1955 and 1956	283
Garm region	286
Stalinabad region	288
14/16	

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R000617810004-4"

S/519/60/000/008/005/031 D051/D113

AUTHOR:

Gzovskiy, M.V.

TITLE:

Tectonic physics and seismic zoning

SOURCE:

Akademiya nauk SSSR. Soviet po seysmologii. Byulleten, no.8, Moscow, 1960. Voprosy seysmicheskogo rayonirovaniya. 67-72

TEXT: The author discusses the character and compilation of seismotectonic maps, and shows how the parameters essential for compiling these maps can be determined. In the author's opinion, seismotectonic maps must separately define zones of present and possible future earthquakes differing in depth, energy, and recurrence. The total amount of seismostatistical data for each point or uniform zone can be most fully rendered by the main parameters of the logarithmic curve of recurrence of earthquakes of different energy. The main parameters of these curves, which were compiled by Yu.V. Riznichenko, I.L. Nersesov, and V.I. Bune for a number of Central Asian districts, are as follows: (1) the upper limit of earthquake energy (U_{Smax}); (2) the angular coefficient v of the rectilinear section of the curve in the area

Card 1/4

S/519/60/000/008/005/031 D051/D113

Tectonic physics...

of micro-earthquakes; (3) the location level of the rectilinear section of the curve, fixed by the recurrence of earthquakes of any definite energy (N,). The author considers that seismotectonic maps should basically show zones with different U_{Smax} of earthquakes with a definite focus depth. Within the zones, sections characterized by seismostatistical data and sections established as a result of extrapolation and interpolation according to geological features should be distinguished. The recurrence of earthquakes N_i must represent the second (superposed) sign. For V_{Smax} , the author developed a formula which contains quantities (coefficient of proportionality between earthquake center volume and cube of fault extension, velocity gradient of tectonic movements, coefficients of viscosity and liberated energies, etc.) with peak values in each section, the total number of peak values determining the upper limit of earthquake energy. For some sections, this limit is established seismostatistically, and for others, in which seismostatistical data are interpolated or extrapolated, the upper limit can remain unaltered or vary depending on constancy or change in the values of the quantities of the formula. The angular coefficient y of the rectilinear part of the curve of recurrence permits calculating how many

Card 2/4

S/519/60/000/008/005/031 D051/D113

Tectonic physics...

times (m) the number of faults will decrease when their length is increased r times:

The author further derived the formula

$$lg l = \frac{1}{3} (lg U_S - lg L),$$
 (6)

where L is the coefficient of proportionality between the cube of the length of faults 1 and the energy of earthquakes \mathbf{U}_{S} caused by them. It shows that

for sections with uniform conditions for earthquakes, the logarithm of the length of faults causing the shocks is a linear function of the logarithm of the earthquake energy, if L can be determined for some earthquakes. The author also shows this dependence diagrammatically and proves that, on the basis of seismic data, the empirically established curve of recurrence and coefficient L permit the size of faults and the characteristics of their historical development to be evaluated. The remainder of the article is

Card 3/4

Tectonic physics...

S/519/60/000/008/005/031 D051/D113

devoted to recommendations for the compilation of tectonic maps. The principles and methods of compiling standard tectonic maps are being developed by V.N. Krestnikov and G.I. Reysner using the Garmskiy rayon and other sections of Central Asia as examples. Soviet scientists V.V. Belousov, G.P. Gorshkov, A.V. Goryachev, I.Ye. Gubin, I.V. Kirillova, V.N. Krestnikov, B.A. Petrushevskiy, I.A. Rezanov, and A.A. Sorskiy are mentioned for their efforts in developing seismotectonic maps at the Institut fiziki zemli AN USSR(Institute of Physics of the Earth, AS USSR), I.M. Kuznetsova and T.A. Tikhomirova - for having calculated, together with the author, certain geophysical coefficients belonging to the USMAX

ASSOCIATION: Institut fiziki zemli AN SSSR (Institute of Physics of the Earth of the AS USSR)

Card 4/4

\$/169/62/000/002/013/072 D228/D301

AUTHOR:

Gzovskiy, M. V.

TITLE:

Physical theory of tectonic fracture formation

PERIODICAL: Referativnyy zhurnal, Geofizika, no. 2, 1962, 10-11, abstract 2A68 (V sb. Probl. tektonofiziki, M., Gosgeol-

tekhizdat, 1960, 78-96)

TEXT: The notion about the strain ellipsoid finds a strict tectonic basis in the geometric consideration of any homogeneous deformation. The strain ellipsoid can, therefore, be used to describe complete homogeneous deformation and also its plastic and elastic components. The method proposed by Becker for comparing fissures with the strain ellipsoid does not always give accurate results. In the study of fissures and large tectonic fractures the author proposes the use of the complex of contemporary notions about the strengths of materials. It is noted that the nominal momentary tensile strengths of rocks is about 0.0001 of the modulus of elasticity, and that the nominal momentary shearing-strengths are about

Card 1/3

S/169/62/000/002/013/072 D228/D301

Physical theory of ...

0.001 of the shear modulus of rocks. Hence elastic elongations and elastic shears in rocks are always less than 1% and 10 respectively. The author proposes a complex physical theory for tectonic fracture formation which contains 6 basic principles. 1) In each material two types of rupture -- tearing and shearing -- and their two corresponding strengths are possible. In each specific case rupture is determined by the character of the strain state and by the correlation between the material's tensile and shearing strengths. 2) The tenacity values do not remain constant but change in relation to the duration of the action, the manifold compression and the temperature. This principle is corroborated by numerous experiments and theoretical research. 3) The strengths of rocks may vary widely depending on their lithologic and petrographic peculiarities. 4) When studying the process of fracture formation it is necessary to take into account the influence of the selfemerging rupture surfaces on the strained state of their surrounding areas. In some areas a weakening of the stresses occurs, but in others they are streng thened. 5) The processes of rock rupture develop over a long period of time irregularly, together with plastic and

Card 2/3

Card 3/3

S/169/62/000/006/010/093 D228/D304

AUTHOR:

Gzovskiy, M. V.

TITLE:

Modelling of tectonic processes

PERIODICAL:

Referativnyy zhurnal, Geofizika, no. 6, 1962, 9-10, abstract 6A58 (V sb. Probl. tektonofiziki, M., Gos-

geoltekhizdat, 1960, 315-344)

TEXT: The modelling of tectonic processes is based on the principles of: 1) the similarity of the models of natural objects; 2) the choice (the selectivity) of natural processes; 3) the separate study of different factors (of the separation) on models; parate study of different factors (of the separation) to a natural object; 4) successive approaches (the approximation) to a natural object; 5) the statistical substantiation of deductions about the results of model tests. Proof is given for the possibility of modelling tectonic processes -- the formation of folds, boudinage ruptures, and other macroscopic manifestations of crustal deformation and disintegration. Conditions of similarity are derived from dif rential or integral equations, describing the fields of tectoric

Card 1/3

- (1) [4] A. J. H. Bill [1] [Bill [2] Sib. [2]

Modelling of tectonic processes

\$/169/62/000/006/010/093 D228/D304

stresses. A similarity condition, illustrated by numerous graphs, is derived mathematically. The question of the extrapolation of laboratory data to notions about extremely long geologic processes, lasting for thousands and even millions of years, is considered. Conditions of similarity are deduced for the processes of plastic and elastic deformation and rupture formation, both statistical and inertial forces being thereby taken into account. The coefficients of viscosity are considered as functions of the temperature, the manifold pressure, and the tangential stress intensity, the coefficients of durability being regarded as time functions; the shearing strengths depend on the normal stresses. Besides the general conditions of similarity, allowance was also made in a specific model for the boundary and the initial conditions. The practical feasibility of modelling is demonstrated. In addition to this a comparison is given for the mechanical properties of rocks and equivalent materials. The optical method of studying stresses in models is also examined. Examples are quoted for the use of models in solving geological and geophysical problems: 1) the formation mechanism for longitudinal flexure and lamination folds in the

Card 2/3

S/049/60/000/03/001/019 E131/E691

Grovekt, V. M.V., Kreetnikov, V.N., Nersesov, I.L. and Reysner, G.I. AUTHORS:

New Principles of Seismic Zoning Derived for Central Tyan'-Shan. II TITLE:

PERIODICAL: Isvestiya Akademii nauk SSSR, Seriya geofizicheskaya, 1960, Wr 5, pp 353-370 (USSR)

This is a continuation of work published in this journal, Mr 2, 1960. The investigation is based on the seismic soning chart of the USSR ABSTRACT: (Ref 1.3). Only earthquakes of magnitude 9, corresponding to the energy E = 1015 J, were considered. The purpose of the investigations was to establish those areas considered to be the safest from the

point of view of engineering construction. The method was based on the rate of tectonic movements as described by Grovekiy et al. (Ref 5). The map shown in Fig 1 was compiled on the basis of the results thus obtained. The method of seismic prognosis consisted of three separate

1) The territory was divided according to the gradients of tectonic

2) The zones thus determined were classified according to the movements.

magnitude of the above rate. Card 1/3

APPROVED FOR RELEASE: 09/17/2001

्राचन करता व्यासमार कार विभाग के सहिए सिमा १३३६ । असी एस १५ इसे १४ मी १५ वर्ष में १५ मिल १५ स्थाप १५ इसे १५ सि इसे १५ में १९ स्थाप विभाग के सम्बद्धित के समित स्थाप १९३५ । असी १९४५ स्थाप १९४५ स्थाप १९४५ स्थाप १९४५ स्थाप १९

> \$/049/60/000/03/001/019 E131/E691

New Principles of Seismic Zoning Derived for Central Tyan'-Shan. II

As an example, the probability $p \leqslant 0.001$ of occurrence of earthquakes (once or less in 1000 years) is suitable for the erection of less durable structures and $p \leqslant 0.0001$ (once or less in 10000 years) for long-lasting structures. Determination of such a probability can be based on the above soning charts and the nomogram given in Fig 6. Charts showing the regions of various probabilities of the occurrence of earthquakes, calculated for Central Tyan'-Shan, are given in Figs 7 and 8. There are 8 figures and 19 references, 17 of which are Soviet and 2 English.



ASSOCIATION: Akademiya nauk SSSR, institut fiziki zemli (Academy of Sciences USSR, Institute of Physics of the Earth)

SUBMITTED: July 9, 1959

Card 3/3

5.3830

69680

AUTHORS:

Shchegolevskaya, N. A., Osokina, D. N.,

S/153/60/003/01/047/058

Gzovskiy, M. V., Sokolov, S. I.

B011/B005

TITLE:

Polymeric Materials With Different Physicomechanical Characteristics

for Stress Investigations by the Optical Method

PERIODICAL:

Izvestiya vysshikh uchebnykh zavedeniy. Khimiya i khimicheskaya

tekhnologiya, 1960, Vol 3, Nr 1, pp 172-175 (USSR)

The authors proved the possibility of producing photoelastic substances with high optical activity and a wide range of elasticity moduli (up to gel-like substances of the gelatin-jelly type). These substances are produced on the basis of copolymers of unsaturated polyesters, of styrene, band of glyphthal 45 and epoxide resins. These materials had manifold, given physicomechanical properties / The authors paid special attention to the production of plastics with a viscosity (η) of $10^4 - 10^7$ poise, an elasticity modulus E = $10^{-1} - 10^1$ kg/cm², and a high optical activity. Products of copolymerization of unsaturated esters and vinyl monomers have a reticular structure. Products with different optical and mechanical properties can be obtained by changing the number of chemical bonds between the molecules. For this purpose, saturated dicarboxylic acids (e.g. sebacic acid) are introduced besides unsaturated maleic acid, and the number of individual monomers (e.g. styrene) is varied. In contrast to previous papers, the authors investigated polyesters obtained with the use of reduced amounts of maleic acid Card 1/4

69680

होता होने, बुद्धानिक्य साहित्य हो। सहित्य स्थानिक विद्यानिक विद्यानिक विद्यानिक स्थानिक स्

Polymeric Materials With Different Physicomechanical Characteristics for Stress Investigations by the Optical Method

S/153/60/003/01/047/058 B011/B005

and an excess of diethylene glycol (according to Ref 3). It was proven that the maximum amount of sebacic acid must not exceed that of maleic acid (1:1), or the product would become opaque. Benzoyl peroxide (0.1 - 1%) was added to the mixture. Polymerization was carried out at 20-40°. The polyester - styrene ratio was varied between 2:1 and 500:1. Optically active substances with $E = 0.2 - 20 \text{ kg/cm}^2 \text{ and a coefficient of optical activity B}_{\sigma} = 100-1000 \text{ brewster}$ $(10^{-13} \text{ cm}^2/\text{dyn}) \text{ were obtained with styrene at a ratio of 3ebacic and maleic acid in polyesters of 2:1, and acid: diethylene-glycol of 2:3. Even at a polyester - styrene ratio of 1:500, they remained gelatinous. The figure (p 174) shows that both the modulus E and the optical activity of the polymer considerably increase with increasing styrene content. Modified glyphthal resins are condensation products of polyatomic alcohols (pentaerythrite, glycerin, diethylene glycol) with phthalic and maleic acid (Ref 4). They are called "gliftamal". They are suited for work at room temperature, having <math>E = 50,000 \text{ kg/cm}^2$ and $B_{\sigma} = 36 \text{ brewster}$. Very transparent substances with $\eta = 10^4 - 10^7$ poise, and $B_{\sigma} = 2.10^3 \text{ brewster}$ can be Card 2/4

Polymeric Materials With Different Physicomechanical Characteristics for Stress Investigations by the Optical Method

59680 \$/153/60/003/01/047/058 B011/B005

obtained by changing the acid - alcohol ratio, adjusting the thermal treatment, and using plasticizers. Previously (Ref 5) the authorshad produced an optically active, solid, elastic material "epoksiftamal" from the epoxide resin E-40. In the present paper, the amount of hardening agent was reduced to 3-5%. The resin became jellylike but remained brittle. At a content of 2-5% of maleic anhydride and 30% of dibutyl phthalate, an optically active, highly viscous liquid without a noticeable yield point was formed. At 5-22% of dibutyl phthalate, the resin has the maximum shearing stress. By combination of epoxide resin with hardening agent and plasticizer, it is possible to produce optically active substances with manifold physicomechanical properties: from elastic bodies to viscous liquids. There are 1 figure and 5 Soviet references.

ASSOCIATION:

Moskovskiy institut khimicheskogo mashinostroyeniya; Kafedra

fizicheskoy khimii

(Moscow Institute for the Construction of Chemical Machines;

Chair of Physical Chemistry)

Card 3/4

Polymeric Materials With Different Physicomechanical S/153/60/003/01/047/058 Characteristics for Stress Investigations by the Optical Method

SUBMITTED: April 10, 1959

Card 4/4

GLOVSKIY, M.V.; KRESTNIKOV, V.N.; LEONOV, N.N.; REZANOV, I.A.; REYSNER, G.I.

Map of recent tectonic movements in Central Asia. Izv. AN SSSR. Ser.
geofiz. no.8: 1168-1172 Ag '60. (MIRA 13:8)

1. Akademiya nauk SSSR, Institut fiziki Zemli.
(Soviet Central Asia--Geology, Structural--Maps)

85707

s/069/60/022/004/004/005/XX BO03/B056

54400

1274, 1333, 1263

AUTHORS:

Osokina, D. N., Gzovskiy, M. V., Vinogradov, G. V., and Pavlov, V. P.

TITLE:

Investigation of the Processes of Plastic Deformation by Means of Ethylcellulose \Solutions and Gels and Optical

Polarization

PERIODICAL: Kolloidnyy zhurnal, 1960, Vol. 22, No. 4, pp. 434-442

TEXT: The investigations described in the present paper deal with the problem as to whether it is, in principle, possible to study shear stress and rate of deformation in plastically deformable soft bodies by the method of optical polarization. The results obtained may be usefully applied in the mechanics of disperse systems, of tectonic physics, etc. The measurements were carried out in a device designed by V. P. Pavlov (Ref. 13) and constructed by the Institut fiziki Zemli AN SSSR (Institute of Geophysics of the AS USSR), which simultaneously, fulfilled the function of a plastoviscosimeter and a dynamooptimeter. The device schemat-

card 1/3

85707

Investigation of the Processes of Plastic S/069/60/022/004/004/005/XX B003/B056

Deformation by Means of Ethylcellulose Solutions and Gels and Optical Polarization

ically shown in Fig. 1 and described in detail in the original paper contains, among other things, a kCID-52 bolariscope (KSP-5), as well as a Berek compensator for measuring the optical effect. The dependence of shear stress on deformation as well as the deformation-kinetic diagrams were ascertained with the help of Pavlov's elastoplastoviscosimeter (Ref. 14). The material used was Soviet ethylcellulose of the type K-290 (K-290) with a molecular weight of 7.7-10⁴ and a substitution degree of (K-290) with a molecular weight of benzene solution was -290 centipoise 46.25%. The viscosity of a 5% alcohol benzene solution was -290 centipoise at 20°C. The ethyl cellulose was used in a dissolved state in benzyl alcohol (of different concentrations) and/or in benzyl alcohol dibutyl-alcohol (of different concentrations) and/or in benzyl alcohol dibutyl-phthalate mixtures (whose mixing ratio was varied in a 30% concentration). The measured results are shown in the diagrams of Figs. 2 - 5. The modulus of shear of the ethyl cellulose solutions was between 0.01 and 1 kg/cm², the viscosity between 10² and 10⁷ poise. Owing to their mechanimodulus of shear of the ethyl cellulose solutions corresponded to highly cal properties, the solutions in benzyl alcohol corresponded to viscous Newton liquids having a completely linear dependence of viscous Newton liquids having a completely linear dependence

Card 2/3

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R000617810004-4"

Investigation of the Processes of Plastic S/069/60/022/004/004/005/XX Deformation by Means of Ethylcellulose Solutions and Gels and Optical Polarization S/069/60/022/004/004/005/XX

the birefringence (Δ n) both on the shear stress as also on the deformation rate. The solutions containing dibutylphthalate acquired plastical consistence with an increase in the dibutylphthalate content. The aforementioned dependences are, in this case, not linear but exponential. The coefficient of optical activity V_{τ} ($V_{\tau} = \Delta n/\tau$; Δn - amount of the double refraction of light, τ - shear stress) is in the case of 10 to 35% ethyl cellulose solutions practically independent of the concentration, and is between 5-7.10⁴ Brewster. V_{τ} decreases with an increasing dibutylphthalate content in the mixture, as well as with the sixture.

content in the mixture, as well as with decreasing temperature. Among others, a paper by G. V. Vinogradov and V. N. Manin is mentioned. There are 5 figures, 1 table, and 13 references: 11 Soviet, 1 US, and 1 German.

ASSOCIATION: Institut fiziki emli im. O. Yu. Shmidta Moskva (Institute of Geophysics imeni O. Yu. Shmidt, Moscow)

SUBMITTED: April 19, 1959

Card 3/3

GZOVSKIY, M.V.; OSOKINA, D.N.

Model study of rheological processes in solids, with stress determination by optical polarization. Koll. zhur. 22 no. 5:560-568 S-0 '60.

1. Institut fiziki zemli AN SSSR im. O.Yu.Shmidta.

(Deformations (Mechanics)) (Rheology)

PETRUSHEVSKIY, B. A., geolog; BELOUSOV, V. V., geolog; GZOVSKIY, M. V., geolg; GCOVSKIY, M. V., geolg; GCOVSKIY, M. V., geolog; GCOVSKIY, M. V., geolog; GCOVSKIY, M. V., geolog; GCOVSKIY, M. V., geolog; REZANOV, I. A., geolog; SORSKIY, A. A., geolog.

Geologic principles of seismis division into districts. Studii astron seismol 6 no.2:181-186 '61.

1. Institut fiziki Zemli AN SSSR.

CIA-RDP86-00513R000617810004-4 "APPROVED FOR RELEASE: 09/17/2001

S/169/63/000/003/033/042 D263/D307

AUTHOR:

Gzovskiy, M.V.

TITLE:

Problems of magmatism and tectonic physics

PERIODICAL:

Referativnyy zhurnal, Geofizika, no. 3, 1963, 3, abstract 367 (In collection: Vopr. Vulkanizma, II.,

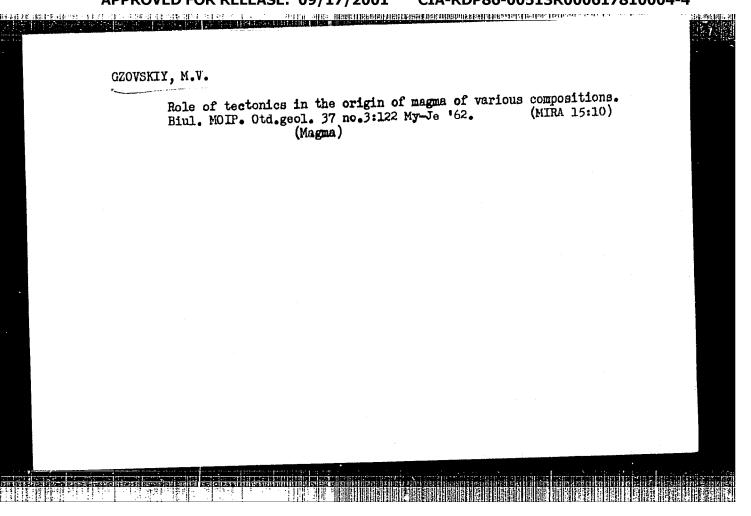
AN SSSR, 1962, 297-318)

A discussion is given of the tectonic conditions of the formation of magma, considering from tectonic data the causes of the formation of magma, considering from tectonic data the causes of the change of all-round pressure, examining the combination of magmatism with tectonic movements and estimating the part of the lower-matism with tectonic movements and estimating the part of the lower-matism with tectonic movements and estimating the part of the lower-matism with tectonic movements. ing of surrounding pressure during the formation of various magmas. A theoretically derived tectonic equation showed that for most basic magmas the Lowering of surrounding pressure is the main factor in their formation while in most cases of acid magmas this factor plays a secondary part. Analysis of existing material indicates a frequent paragenetic connection between tectonic movements and formation of Most tectonic motions are related to deep physical and chemmagma.

Card 1/2

CIA-RDP86-00513R000617810004-4" APPROVED FOR RELEASE: 09/17/2001

n weethers	A YES OF BURBERS, HE HAS RIPER OF THE ME CAPITURE	CHARACHAR THE REAL PROPERTY OF THE REAL PROPERTY OF THE PARTY OF THE P	BRIGHTH STREET CONTRACTOR CONTRAC	117 127 1711
		in the second se	L69/63/000/003/033/042 63/D307	19 1
		\$/:	169/63/000/003/033/03-	
	a ati am	D2	63/0307	
	Problems of magmatism		อา+คอมตัก วัก S	ome
	ical reactions, proceeding cases formation and eruptions the Earth's sur	in the subcrusta	1 Layer, arthodes	ıg
	cases formation and eruption or rise of the Earth's sur	ion of magma cause	s corresponding	
	Cases Ionillation and I a sill	rface. It is conc	Ludied that to the tor	the
	combination of physical are formation of magma; tect	nd chemical condition	an important but not	: a 🔭 🙀
	combination of magma; tect	onic movements bra	ty att amportant	
	formation of magma; teoritical part. (99 reference critical part. 199 reference compared to the compared to th	ences).		
	critical part. (99 refer / Abstracter's note: Comp	lete translation_/		
	Z Apgoza			
		선임으로 살아 그들은 사이다.		
		즐거움, 원하다 중하음을 다짐.	三边期 化全电流制度 翻翻	
			관점보는 하는 사이트 필요를	
			名阿基尼尔语 医克勒氏溢起剂	
			《新集》:"建设公园的海路建筑	
s little	Card 2/2			
	Time			
				7 (14)
1世間111	A 計畫 1 写真 紫红细胞 相談 計畫 逐步 1 年 5 出 期			開展: 推翻出底台灣 法



TO THE SHEET THE REPORT OF THE PROPERTY OF THE

OSOKINA, Doriana Nikolayevna; GZOVSKIY, M.V., otv. red.; MILLEF, Yu.G., red.; MEDER, V.M., red. izd-va; RYLINA, Yu.V., tekhn. red.

[Plastic and elastic low-module optically-active materials for studying stresses in the earth's crust by the modeling method] Plastichnye i uprugie nizkomodul'nye opticheski-aktivnye materialy dlia issledovaniia napriazhenii v zemnoi kore metodom modelirovaniia. Moskva, Izd-vo AN SSSR, 1963. 195 p. (MIRA 17:1)

GZOVSKIY, Mikhail Vladimirovich; BELOUSOV, V.V., otv. red.;
KOLOSHINA, T.V., red. izd-va; ASTAF'YEVA, G.A., tekhn.
red.

[Basic problems in the tectonophysics and tectonics of the Baydzhansay anticline] Osnovnye voprosy tektonofiziki i tektonika Baidzhanskaiskogo antiklinoriia. Moskva, Izd-vo AN SSSR. Pts.3-4. Baidzhanskaiskogo antiklinoriia. (MIRA 16:10)

1. Chlen-korrespondent AN SSSR (for Belousov). (Karatau--Geology, Structural)

MIK/OW EWT(1)/EWA(h) 1 17585-65 \$/0000/64/000/000/0058/0077 ACCESSION NR: AT4049225 AUTHOR: Gzovskiy, M. V. TITLE: A tectonophysical comparison of recent tectonic movements with the seismicity, gravitational anomalies, magmatism and deep processes Within the limits of the SSSR SOURCE: Vsesoyuznoye tektonicheskoye soveshchaniye. 2d, Dushanbe, 1962. Aktivizirovanny: ye zony: zemnoy kory:, noveyshiye tektonicheskiye dvizheniya seysmichnost' (Activated zones of the earth's crust, latest tectonic movements and seismicity); materialy soveshchaniya. Moscow, Izd-vo Nauka, 1964, 58-77 TOPIC TAGS: Neogene-Quaternary movement, tectonophysical movement, isostatic movement, antiisostatic movement, earthquake focus, land uplift rate, earthquake frequency, subcrustal process ABSTRACT: An attempt has been made to prove that the solution of various engineering problems, such as the prediction of the force and frequency of earthquakes in a particular area, should be based on the physical interpretation of tectonic movements. The following comparisons are discussed in this connection: the direction of the geological movements with the results of abyssal seismic soundings, the vertical and horizontal speeds of such movements, the lapse rate and the

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R000617810004-4"

ं स्वराहाता हो। विशेष अधिकार प्राप्त कार्य हो। विशेष विशेष

L 17585-65

ACCESSION NR: AT4043225

spatial distribution of earthquake foci, etc. The uplift rate of the latest movements within the territory of the SSSR is only 0.25 mm/year (as an average over a 30-million year period). The lapse rate distribution of the latest vertical movements in the SSSR as a whole appears to conform to the seismic zoning maps and earthquake epicenter maps compiled by the AN SSSR. The majority of the contestporary abyssal fracture zones are steeply inclined (60-70% and more), extending much deeper than the base of the earth's crust. [nasmuch as the earth's crust is 90% isostatic, it is assumed that the convergence rate of the uplift and subsidence of the earth's crust is at least the same as the highest lapse rate of the movement component. A comparison of tectonic movements with magmatic processes reveals that the relationship between them is paragenetic and not merely causative. The currently known geological and geophysical facts support the hypothesis that the physicochemical transformation of matter in the upper mantie of the earth is the major cause of tectonic movements. The average uplift rate of the parth's crust must be related to the growing crustal thickness produced by the adhesion of increasing quantities of acid igneous rock to the crust. Orig. art. has: 11 numer bered formulas, 6 figures and one table.

ASSOCIATION: none

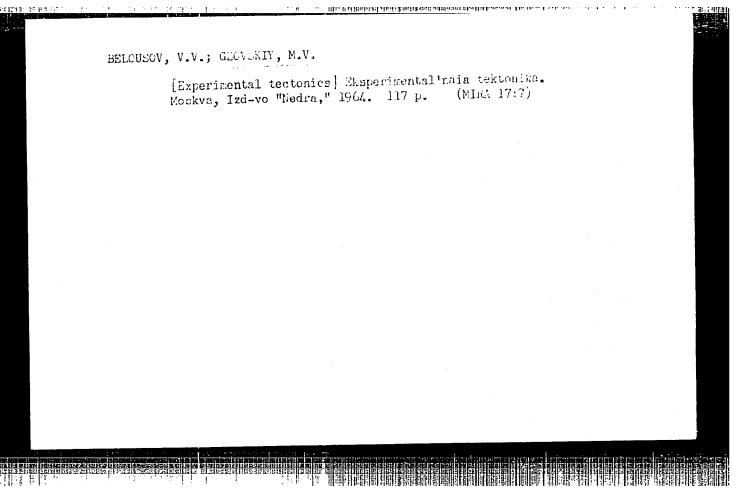
SUBMITTED: 25Mar64

ENCL: 00

SUB CODE: ES

Card 2/2 NO REF S(IV: 055

OTHER: 015

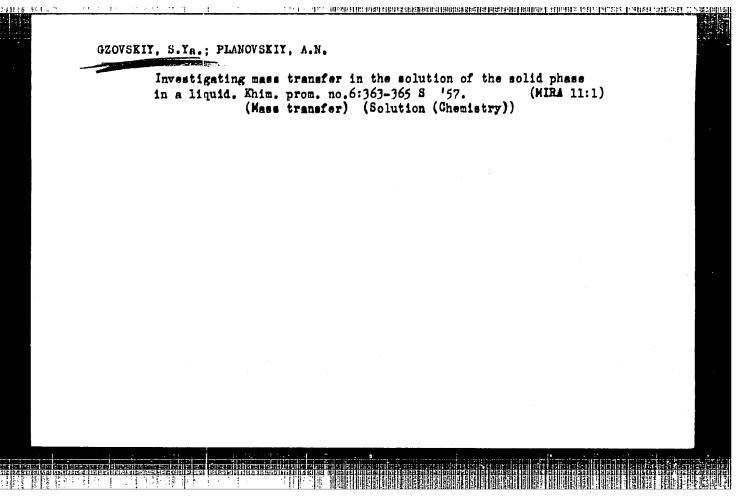


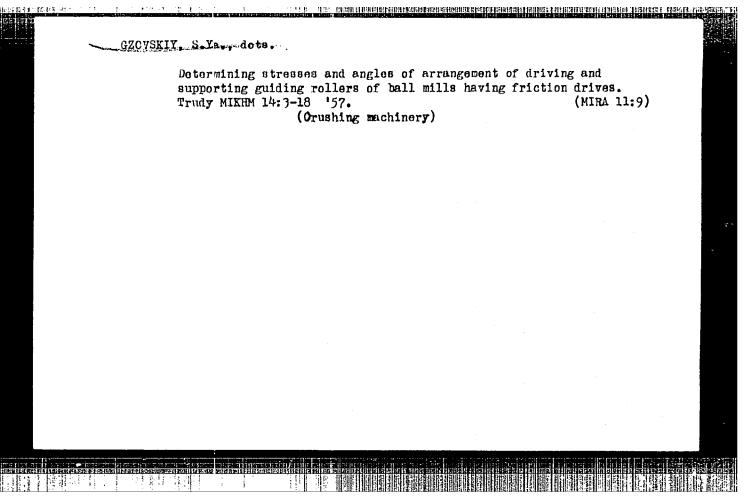
GZOVSKIY, S.Ya., kand. tekhn. nauk

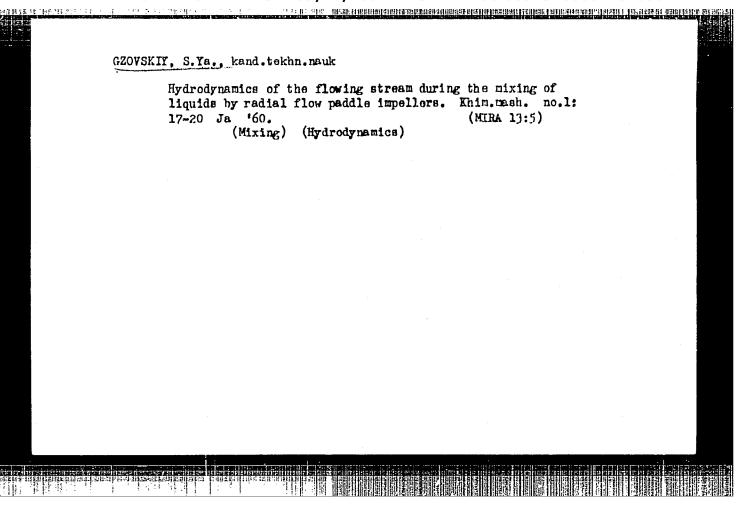
Kinematics of the stream during the mixing of the liquid by radial blade impellers. Khim. mash. no.6:13-20 N-D '59.

(Mixing) (Hydrodynamics)

(Mixing) (Hydrodynamics)







DIN VEY [Ting Wei]; GZOVSKIY, S.Ya.; PLANOVSKIY, A.N.

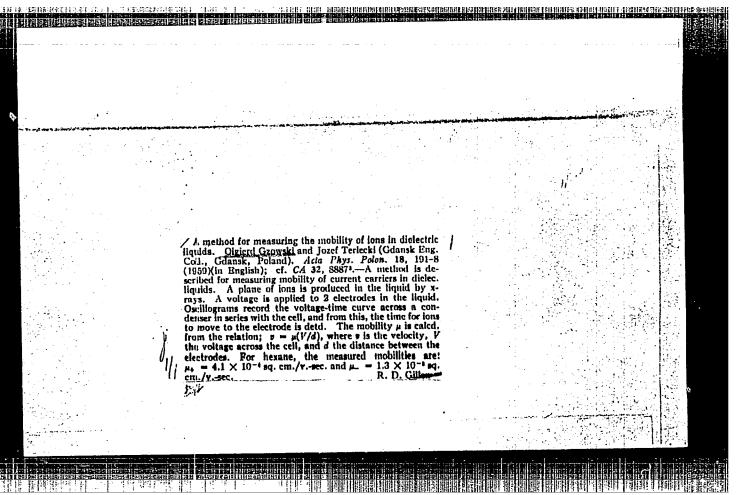
Study of the kinetics of solution during mixing by mechanical mixers. Khim. prom. no.4:286-292 Ap '63. (MIRA 16:8)

्राकृतः । १९ प्राप्तिस्य विकास स्थापन्य स्यापन्य स्थापन्य स्यापन्य स्यापन्य स्थापन्य

KARASEV, I.N., inzb.; GZOVSKIY, S. Ya., doktor tekhn. netk

Calculation of the power of anchor and radial paddle type
agitators. Khim. i neft. mashinostr. no.6x16-20 D 164.

(MIRA 18:2)



GZOWSKI, J.

Complaints and grievances. p. 3.

ROLNIK SPOKDZIELCA. (Centrala Rolniczej Społkzielni "Sampopomoc Chlopska") Warszawa, Poland. Vol. 8, no. 13, Oct. 1955.

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

Uncl.

GZRECDALA, J.

Execution of the Plan in most important technical and economic fields in the lst half of 1953. p. 424.

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

TERLECKI, Jozef, dr. inz.; FIGWER, Jan, mgr. inz.; GZOWSKI, Olgierd, dr.

A fire alarm system based on radioactive isotopes. Bud okretowe Warszawa 7 no.7:228-231 J1 '62.

1. Politechnika, Gdansk.

GZULYA, F.I., aspirant

Pathonorphology and pathogenesis of grave forms of Botkin's disease. Zdrav. Lazakh. 17 no.10/11:77-79 '57. (MIRA 12:6)

1. Iz kafedry patologicheskoy anatomii Lazakhekogo gosudar-stvennogo instituta. (HRPATITIS, INFECTIOUS) (ALCOHOL--PHYSIOLOGICAL KFFRCT)

SHAKIMOVA, B.Sh.; GZULYA, F.I.

Itsenko-Gushing disease with pluriglandular insufficiency. Zdrav.
Kazakh. 21 no.2:28-32 '61. (MIRA 14:3)

1. Iz kafedry gospital'ncy terapii (aav. - dotsent R.A.Satpayeva)
i kafedry patologicheskoy anatomii (zav. - professor P.P.Ochkur)
Kazakhskogo meditsinskogo instituta.
(CUSHING SYNDROME) (DEFICIENCY DISEASES)
(ENDOCRINE GLANDS)

TO THE STREET OF THE PROPERTY OF THE PROPERTY

IBRAYEV, Sh.Z., kand.med, nauk; GZULYA, F.I.

Case of typhoid fever in a child of 4 months. Zdrav. Kazakh. 21 no. 4:79-81 '61. (MIRA 14:4)

l. Iz kafedr detskikh bolezmey i patologicheskoy anatomii Kazakhskogo meditsinskogo instituta.

(TYPHOID FEVER)

IBRAYEV, Sh.Z., kand.med.nauk; GZULYA, F.I.

Case of cirrhosis of the liver in an infant. Zdrav. kazakh.
21 no.12:55-57 '61. (MIRA 15:3)

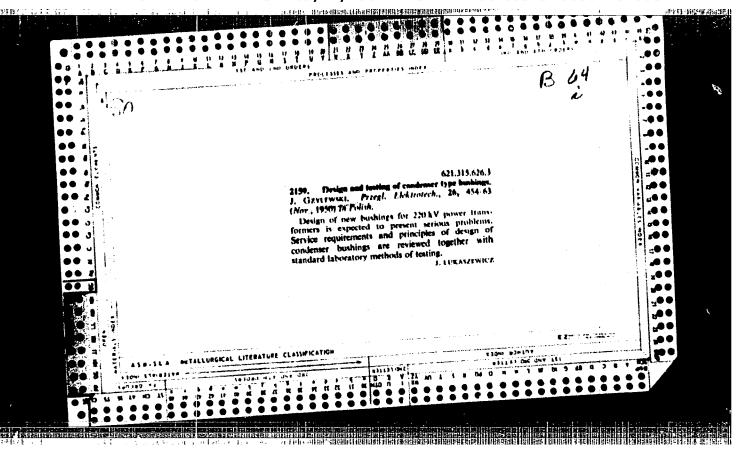
1. Iz kafedr detskikh bolezney i patologicheskoy anatomii Kazakhskogo meditsinskogo instituta.

(LIVER—CIRRHOSIS)

KATSYUBA, K.A.; GZULYA, F.I.

Hepato-cerebral dystrophy in children. Zdrav. Kazakh. 23 no.4: 61-64 '63. (MIRA 17:5)

1. Iz nevrologicheskogo otdeleniya I detakoy klinicheskoy bolinitay i kafedry patologicheskoy anatomii Alma-Atinakogo meditsinakogo instituta.



· ******

Likagionellem Jenen

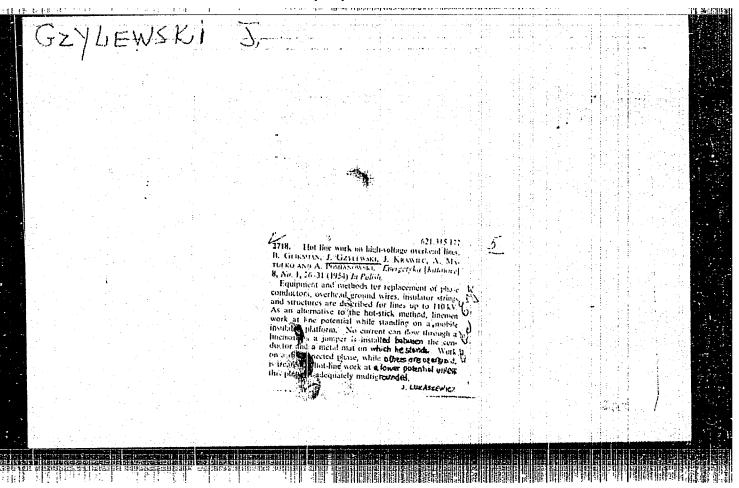
Electrical Engineering Abst.

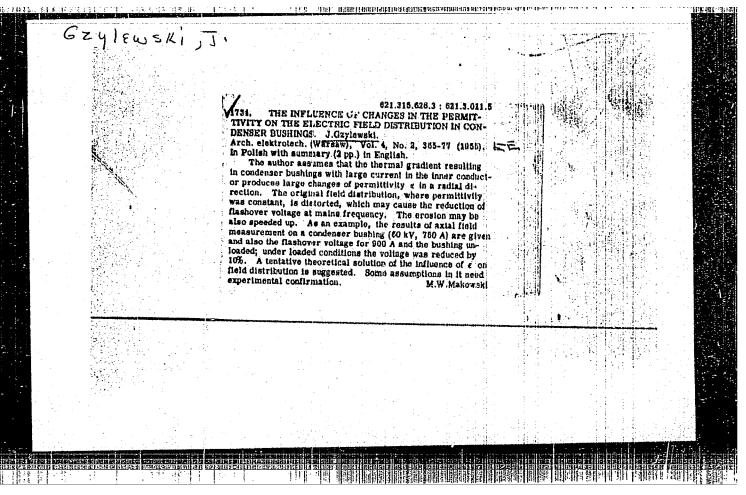
Vol. 57 No. 675

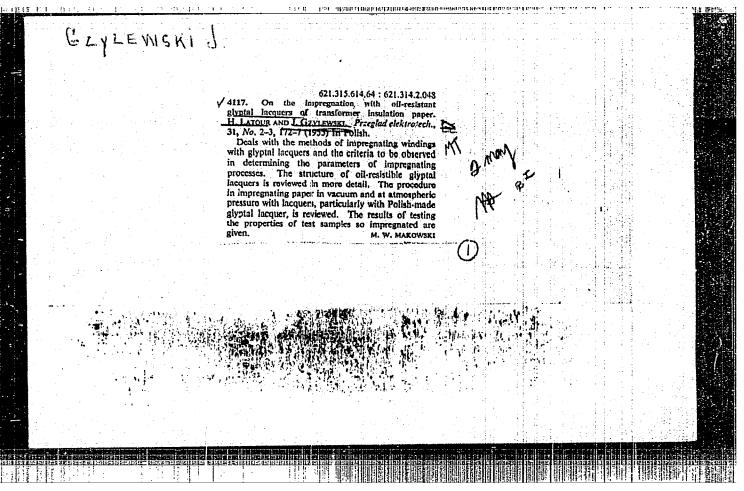
Mar. 1954
Electrical Engineering

Mar. 1954

Malnterancel work on energized Ar. overhead the deterministic Linguistics and the transmission lines, and apparatus used on power transmission lines, an







COUNTRY : POLAND H
CAPEGORY : Chemical Technology. Chemical Products and Their

Applications. Cellulose and Its Derivatives. Paper

ABS. JOUR. : RZhKhim., No 17, 1959, No. 63076

AUTHOR : Gzylowski, J.: Winczakiewicz, A.

INSTITUTE : Electrotechnical Prescpahn

ORIG. PUB. : Przegl. paniern., 1959, 15, Nol, 12-16

ABSTRACT Presented are requirements for electrochemical

Prosspahn (mechanical, physical, chemical, and electrical properties.). Characteristics of Presspahn made in the GDR, Sweden and Switzerland are compared. Described is the present-day condition of Presspahn production in the

Polish Democratic Republic.

From the author's resume.

Card:

H - 153

L 6271L-65 EVP(k)/EVP(z)/EMA(c)/EVP(b)/EWA(d)/EWP(t) JJF(c) JJF(c) JJ/HV NCCESSION NR: AP5011791 PO/OC21/65/CXI/OC4/O121/0125 J 9
AUTHOR: Gzylewski, J. (Master engineer); Las, T. (Master engineer); Malewski, R. (Master engineer); Mediarski, T. (Master engineer)
TITIE: Application of steep pulse currents to hydrodynamic and magnetic forming of metals
SOURCE: Przeglad elektrotechniczny, no. 4, 1965, 121-125 TOPIC TAGS: aluminum sheet forming, silicon sheet forming, transformer metal.
magnetic metal forming, hydrodynamic metal forming, metal forming 57 55 77 ABSTRACT: This article presents the experimental results from the first series of studies of hydrodynamic and magnetic metal forming. The authors describe the cir-
cuits and parameters of pulse current generators, as well as the properties of such current generators, as well as the properties of such currents as capacitors, trigger and working spark-gaps, and operating to the conditions for generating shock waves in water with the sid of an elec-
tric discharge and the use of exploding wire are given, as are the current curves and calculations of the power and energy dissipated in the circuit. The results of the forming of aluminum and silicon transformer sheets are also given. Included is
Caid 1/2

L 62711-65 ACCESSION NR: AP5011791	
pulse generators even or	a power of about 2 km are stated and trigger spark-usig
	at other problems must be solved before the generators can at other has: 6 formulas, 13 figures, and 1 table.
be used commercially.	
	Too Walewart - Zeklad Wysokich Naplec IEI (Department
ASSOCIATION: Gzylowski,	Las, Malewski - Zaklad Wysokich Naplec IEI (Department ednarski - Zaklad Technologii Mechanicznej Ogolnej Poli ednarski - Zaklad Technologii Mechanicznej Ogolnej Polytechnic
of High Voltage, 1217, B Warszawskiej (Department	Las, Malewski - Zaklad Wysokich Naplec IEI (Department lednarski - Zaklad Technologii Mechanicznej Ogolnej Pol. for Technology of General Mechanics, Warshw Polytechnic
of High Voltage, 1817; B Warszawskiej (Department Institute)	for Technology of General Mechanics, Warshw Polytechnic
of High Voltage, 1817; B Warszawskiej (Department Institute) SUBMITTED: 00	For Technology of General Mechanics, Warshw Polytechnic ENGL: CO SUB CODE: N4, E3
of High Voltage, 1817; B Warszawskiej (Department Institute)	for Technology of General Mechanics, Warshw Polytechnic
of High Voltage, 1817; B Warszawskiej (Department Institute) SUBMITTED: 00	For Technology of General Mechanics, Warshw Polytechnic ENGL: CO SUB CODE: N4, E3
of High Voltage, 1817; B Warszawskiej (Department Institute) SUBMITTED: 00	For Technology of General Mechanics, Warshw Polytechnic ENGL: CO SUB CODE: N4, E3
of High Voltage, 1817; Barsizawskiej (Department Institute) SUBMITTED: 00 NR REF SOV: 003	For Technology of General Mechanics, Warshw Polytechnic ENGL: CO SUB CODE: N4, E3
of High Voltage, 1817; B Warszawskiej (Department Institute) SUBMITTED: 00	For Technology of General Mechanics, Warshw Polytechnic ENGL: CO SUB CODE: N4, E3

GZYRYAN, Mariya.),

Structure of the wood and bark of the apricot tree; materials for the anatomical and physiological study of the fruit trees of Armenia. Izv.An Arm.SSR.Biol.i sel'khoz.nauki. 5 no.8:71-82 '52.

1. Institut plodovodstva Akademii nauk Armyanskoy SSR.

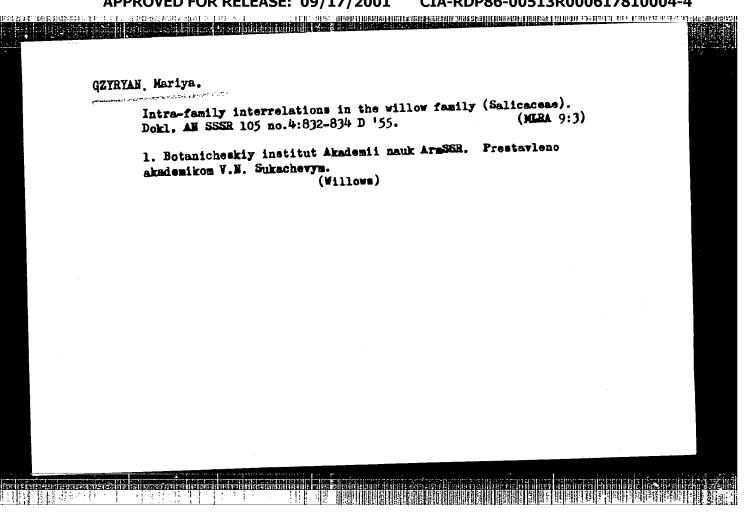
(Armenia.—Apricot) (Wood) (Bark)

GZYRYNN, CT. 5.

YATSENKO-KHMELEVSKIY, A.A.; VIKHROVA, V.Ye.; OKYRYAN, M.S.; MOSKALEVA,
V.Ye.; TAKHTADZHYAN, A.L., otvetstvenayy redaktor; SUVOROVA, L.D.,
tekhnicheskiy redaktor.

[Principles and methods of investigating the structure of wood]
Oenovy i metody anatomicheskogo issledovaniia drevesiny. Moskva,
Izd-vo Akademii nauk SSSR, 1954. 337 p. [Microfilm] (MIRA 8:2)

(Wood)

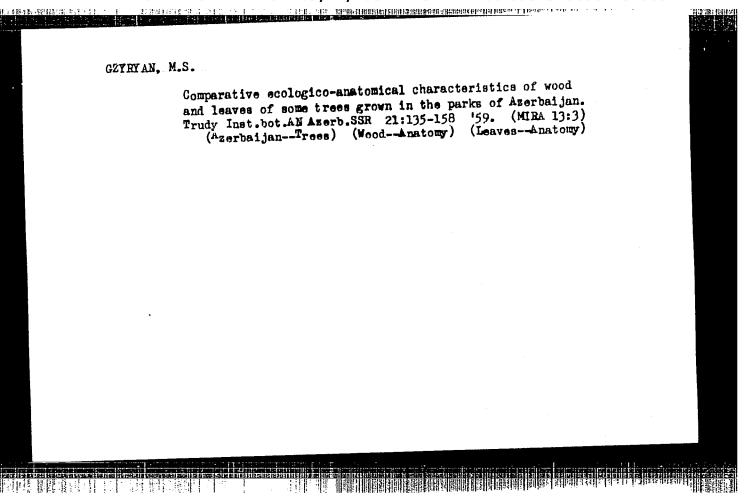


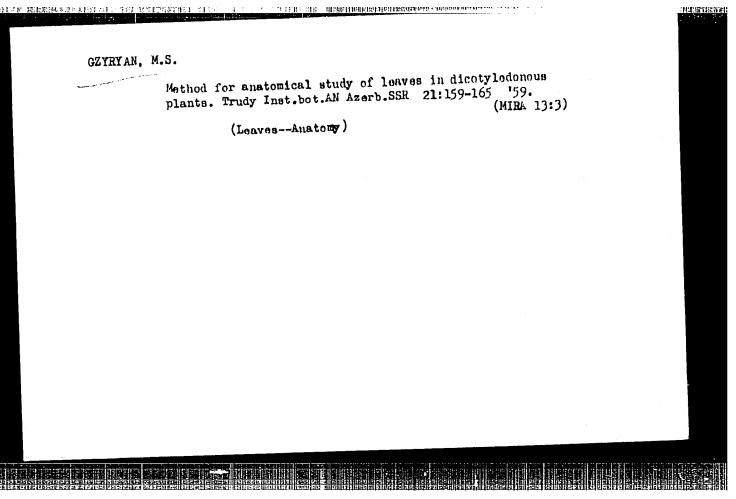
117 R. Thu TREEFHAMMARKE SELECTION OF THE SECOND OF THE S

ARTYUSHENKO, Z.T.; VASIL'YEV, I.V.; GZYRYAN, M.S.; GOLOVACH, A.G.; GRUBOV, V.I.; ZAMYATNIN, B.N.; PIDOTTI, O.A.; PILIPENKO, F.S.; POLETIKO, O.M., kand.biolog.nauk; RODIONENKO, G.I.; RUSANOV, F.N.; SAAKOV, S.G.; SOKOLOV, S.Ya., prof., doktor biolog.nauk, red.; FEDOROV, Al.A.; SHIPCHINSKIY, N.V. [deceased]; SHUL'GINA, V.V.; SHUKHOBODSKIY, B.A.; GOLOVNIN, M.I., red. izd-va; KRUGLIKOVA, N.A., tekhn.red.

[Trees and shrubs of the U.S.S.R.; wild, cultivated, and promising exotic trees and shrubs] Derev'ia i kustarniki SSSR; dikorastushchie, kul'tiviruemye i perspektivnye dlia introduktsii. Moskva. [Vol.4. Angiosperms: Leguminosae - Punicaceae] Pokrytosemennye: Semeistva bobovye-granatovye. 1958. 973 p. (MIRA 11:12)

1. AN SSSR. Botanicheskiy institut.
(Angiosperms) (Trees) (Shrubs)





and the Claim The Manage Language Language Representation of the Language Language and the control of the Cont

GZYRYAN, Mariya

Woody structure in annual shoots of the pear as related to the frost resistance of the variety. Izv. AN Arm. SSR. Biol. nauki 17 no.7:85-89 Jl '64.

(MIRA 17:10)

1. Institut vinogradarstva, vinodeliya i plodovodstva Ministerstva proizvodstva i zagotovok sel'skokhozyaystvennykh productov širmynnskoy SSR.

GYULAI, Karoly

Trade-union work of technologists in the countries has become more active. Munka 8 no.11:31 N '58.

1. Szakszervezetek Orszagos Tanacsa Mernok-Technikus Tanacsa.

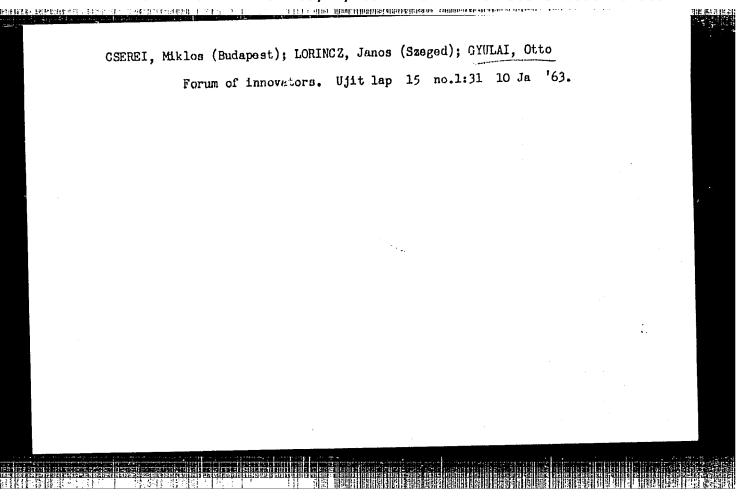
GYULAI, Karoly; KATONA, Mihaly

Some current questions relating to the technical propaganda activity of trade-unions. Munka 10 no.5:14-15 My '60.

1. Szakszervezetek Orszagos Tanacsa Mernok-Technikus Tanacsanak titkara (for Cyulai). 2. Szakszervezetek Orszagos Tanacsanak kulturalis osztalyanak munkatarsa (for Katona)

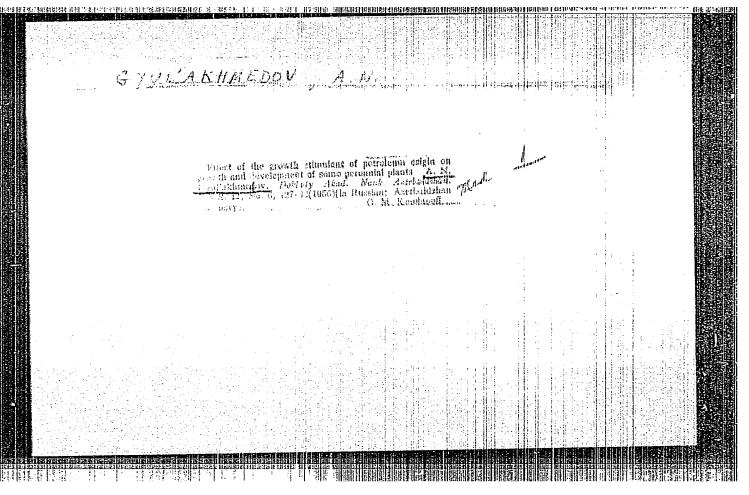
GYULAI, Karoly

Motor lubricant research. Jarmu mezo gep 9 no.2:69-73 F '62.



GYULAI, Z.; BUKOVSZKY, F. (Gegenwartige Adresse: The Federal Advanced Teachers! College, Lagos, Nigeria)

1. Institut für Experimentalphysik der Technischen Nochschule für Bautechnik und Verkehrswesen, Budapest.



"APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R000617810004-4 THE CONTRACTOR OF THE PROPERTY OF THE PROPERTY

J-.1

USSR / Sail Science. Mineral Fortilizers.

Abs Jour: Rof Zhur-Biol., No 8, 1958, 34418.

: Gyullakhmadov, A.

: Experimental Field of the Azerbaydzhan Scientific author Ins t

Rosearch Chemical Institute.

: Asports of Using Micro-fortilizors in Agrigulture Title

of Azorbaydzhan.

Crig Pub: Sots. s.kh. Azerbaydzhana, 1957, No 3, 12-16.

Abstract: On light-chostnut brown soils of the Experimental

Field of the Azerbaydzhan Scientific Research Chomical Institute, a pro-s wing placement of 1.5 kg/ha of B plus 2 kg/ha of Mn incroased the yield of the actton plant by 8.9 c/he (by 55.6%), and placement of 2 kg/ha of Cu plus 1.5 kg/ha of nitric acid uranium by 4.7 c/ha (or by 18.5%). Placement of trace elements during the period of

card 1/2

37

CIA-RDP86-00513R000617810004-4" APPROVED FOR RELEASE: 09/17/2001

M-4

USSR / Cultivated Plants. Commercial, Oleaceous, Sugar Bearing.

: Ref Zhur - Biologiya, No 2, 1959, No. 6336 Abs Jour

Author

: Gyul'akhmodov, A. N. : Azerbaydzhan Scient.-Fes. Institute of Cotton Inst

Cultivation

: The Effect of Uranium on the Development and Title

Productivity of Cotton Plants

: Izv. AN AzerbSSR, 1957, No 9, 73-82 Orig Pub

: Data is given on a study conducted at the Abstract Azerbaydzhan Scientific Research Institute of Cotton Cultivation on the introduction of uranium nitrate in doses of 200, 500 and 1000 mg per vessel in vegetation experiments and

0.5 and 1.5 kg/ha in the fields during the planting No 114 cotton variety. The process

Card 1/3

85

USSR / Cultivated Plants. Commercial, Oleacoous, Sugar Bearing.

M-4

Abs Jour : Ref Zhur - Biologiya, No 2, 1959, No. 6336

of nitrification proceeded at a moderate rhythm and with increased intensity; the usual damping in certain vegetation periods of the cotton plant was avoided when 200 and 500 mg were introduced. However, the nitrification process was impeded when 1000 mg were introduced in a vessel. Uranium inhibits growth in the initial phase of development of the cotton plant, but it stimulates it during the fruit bearing and ripening phases, increasing the number of fruit buds by 14 - 17% in comparison with the control. It also increases the yield of cotton wool (in the field experiments) by 1.7 - 4.7 cwt/ha. Uranium prolongs the budding and blooming phases in the cotton

Card 2/3

APPROVED FOR RELEASE: 09/17/2001 CIA-RDP86-00513R000617810004-4"

Card 3/3

ALIYEV, G.A., akademik, otv.red.; ABUTALYBOV, M.G., prof., red.; BERZIN, Ya.M., akademik, red.; GADZHIYEV, F.M., kand.vet.nauk, red.; GYUL'AKHMEDOV, A.N., kand.sel'skokhoz.nauk, red.; IVANOVA, N.I., kand.sel'skokhoz.nauk, red.; KARAYEV, A.I., akademik, red.; GUSEYNOV, D.M., red.; GUSEYNOV, B.Z., prof., red.; PEYVE, Ya.V., red.

[Abstracts of reports of the Third All-Union Conference on microelements, April 1958] Tezisy dokladov Vsesoyuznogo soveshchaniya po mikroelementam, Aprel' 1958. Baku, Izd-vo Akad.nauk Azerbaidzhanskoi SSR, 1958. 398 p. (MIRA 12:3)

1. Vsesoyuznoye soveshchaniye po mikroelementam. 3d, 1958.

2. Akademiya nauk Azerb.SSR (for Aliyev, Karayev). 3. Akademiya nauk Latviyskoy SSR (for Berzin). 4. Chlen-korrespondent Akademii nauk Azerb.SSR (for D.M.Guseynov). 5. Chlen-korrespondent Akademii nauk SSSR (for Peyve). 6. Institut pechvovedeniya i agrekhimii AN Azerb.SSR (for D.M.Guseynov, Aliyev, Gyul'akhmedov). 7. Institut bielogii AN Latv.SSR (for Peyve). 8. Stalinskiy meditsinskiy institut (for Ivanova). 9. Institut botaniki AN Azerb.SSR (for B.Z.Guseynov). 10. Azerbaydzhanskiy institut zemledeliya (for Abutalybev).

(Trace elements)

GYUL'AKHMEDOY, A.N.: MANEDOY, A.I.

Possibility of using perlite in agriculture. Dokl.AN Agerb.SSR
15 no.6:509-512 '59. (MIRA 12:9)

(Perlite) (Soil conditioners)

Truce

GYUL'AKHMEDOV, A. N., DOC AGR SCI, "RECONTELEMENTS IN THE SOILS OF THE COTTON GROWING ZONE OF AZERBAYDZHAN AND THEIR EFFECTIVENESS UNDER COTTON." BAKU, PUBLISHING HOUSE OF THE ACAD SCI AZSSR, 1961. (SOIL INST INENI V. V. DOKUCHAYEV). (KL-DV, 11-61, 224).

-204-

