

Comparison of structural changes in ...

S/181/62/004/002/027/05;  
B101/B102

(1955) was used to examine the X-ray structure of the specimens. The disorientation was calculated according to P. B. Hirsch (see below). Results: The original specimens possessed large subgrains ( $80\mu$ ), the lattice was not distorted, and the disorientation was less than  $1^\circ$ . Disorientation reached  $8^\circ$  at  $4.2^\circ\text{K}$ , but was less at  $300^\circ\text{K}$ . Specimens deformed at  $4.2^\circ\text{K}$  underwent relaxation when heated to room temperature. The distortion of the lattice decreased as a result of polygonization of the subgrain fragments. Microdistortions diminished further on heating to creep temperature. The specimen deformed at  $4.2^\circ\text{K}$  and subsequently kept at room temperature had a more uniform and more disperse structure than the specimen heated directly from  $4.2^\circ\text{K}$  to  $700^\circ\text{C}$ . The removal of microdistortions of the specimens, especially of that deformed at  $4.2^\circ\text{K}$ , and the increase in disorientation during the creeping process, indicate that the substructure depends on the temperature at which deformation has taken place. There are 2 figures and 9 references; 8 Soviet and 1 non-Soviet. The reference to the English-language publication reads as follows: P. B. Hirsch, J. N. Kellar, Acta Crystal., 2, 162, 1952.  
Card 2/3

Comparison of structural changes in ...

S/181/62/004/002/027/051  
B101/B102

ASSOCIATION: Fiziko-tehnicheskij institut AN USSR, Khar'kov  
(Physicotechnical Institute, AS UkrSSR, Khar'kov)

SUBMITTED: September 22, 1961



Card 3/3

GINDIN, I.A.; KOZINETS, V.V.; STARODUBOV, Ya.D.; KHOTKEVICH, V.I.

Structural changes in copper depending on low-temperature deformation and subsequent annealing. Fiz.met.i metalloved. 14 no.6:864-873 D '62. (MIRA 16:2)

1. Fiziko-tekhnicheskiy institut AN UkrSSR i Khar'kovskiy gosudarstvennyy universitet.

(Copper--Metallography)  
(Metal, Effect of temperature on)

L 24474-66 EWT(m)/EWP(w)/T/EWP(k)/EWP(t) IJP(c) GS/HW/JD  
ACC NR: AT6010579 (N) SOURCE CODE: UR/0000/65/000/000/0137/0142

AUTHOR: Kozinets, V. V.; Khotkevich, V. I.

ORG: Kharkov State University im. A. M. Gorky (Khar'kovskiy gosuniversitet);  
Physicotechnical Institute, AN UkrSSR (Fiziko-tehnicheskiy institut AN UkrSSR)

TITLE: Investigation of the structural and mechanical characteristics of copper  
after thermomechanical treatment

SOURCE: AN UkrSSR. Mekhanizm plasticheskoy deformatsii metallov (Mechanism of the  
plastic deformation of metals). Kiev, Naukova dumka, 1965, 137-142

TOPIC TAGS: material deformation, copper, mechanical heat treatment, grain size,  
yield stress, metal grain structure

ABSTRACT: The authors study changes in the structure and mechanical properties of  
specimens with identical initial structure after thermomechanical treatment in a  
wide range of degrees of deformation, deformation temperatures and subsequent anneal-  
ing processes. Industrially pure copper specimens measuring 12x2x1.5 mm were stud-  
ied. The experimental procedure is briefly described. A curve for the average

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ACC NR: AT6010579

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volume of the subgrain as a function of annealing temperature for specimens subjected to preliminary deformation at 20°C shows a reduction in grain size for low annealing temperatures to about 300°C with a subsequent increase reaching 1.5-2 times the initial subgrain size after 700°C. Specimens subjected to strong deformation (15 and 32%) show no minimum on these curves. The same relationship for specimens subjected to preliminary deformation at -196°C show practically no difference with respect to shape. The maximum angles for disorientation of the subgrain and the yield stress were also studied as functions of annealing temperature. The curves for these relationships are strikingly similar. This indicates that the angles of disorientation of the subgrains have a predominant effect on the yield stress. No relationship was established between the subgrain or grain size and the yield stress. The tensile strength of all specimens was approximately identical regardless of the degree of deformation, deformation temperature or subsequent annealing processes. Orig. art. has: 4 figures.

SUB CODE: 11/ SUBM DATE: 26Nov64/ ORIG REF: 010/ OTH REF: 003

Card 2/2

PB

ZARETSKIY, Ivan Ivanovich; KOZINEV, V.B., red.; CHULKOV, I.F.,  
tekhn. red.

[Clinical physiology and the methodology of functional  
examination of the kidneys] Klinicheskaja fiziologija i  
metody funkcional'noi diagnostiki pochek. Moskva, Med-  
giz, 1963. 279 p. (MIRA 17:3)

ZATOVIC, Tibor; KOZINKA, Anton

Cutoff knuckle breaker. Elektrotechnik 18 no.10:297-298 0  
'63.

1. Tovarny na obrabeci stroje, n.p., Trencin.

KOZINA, A.M.; RUTKOVSKAYA, Ye.P.

Investigating rock pressure control in auger mining by means of  
modeling. Fiz. mekh. svois., dav. i razr. gor. porod. no.2:163-~~4~~  
174 '63. (MIRA 17:1)



KOZINKA, Vladimir; KLASOVA, Albina; NIZHNYANSKI, Augustin [Niznansky,  
Augustin]

Changes in the physiological regulation of transpiration caused  
by the action of industrial wastes. Biologia 18 no.8:565-578 '63.

1. Otdeleniye fiziologii rasteniy Botanicheskogo instituta Slovats-  
koy akademii nauk, Bratislava.

KOZINKA, V.

**OBJECT**

**Mechanism of action of phytonicides.** Vladimir Kozinka  
and Rudolf Herich (Sov. Univ. Brno, Czechoslovakia).  
The action of phytonicides of  
group (I) on the seeds of cucumber resulted in lowering their  
germinating energy without affecting their germinative  
ability. There were observed striking changes in the  
morphological structure of the root system. Therefore the  
activity of peroxidase (II) more probably by inactivating  
the methyl-oxidase enzymes. The volatile fractions of (I)  
were more effective in inactivating II than the nonvolatile  
ones. D. J. Urbánek

KOZINKA, V.

The physiology of plant acceleration.

p. 641 (BIOLOGIA) Vol. 11, no. 11, 1956,  
Bratislava, Czechoslovakia

SO: Monthly Index of East European Accessions (EEAI) LC, Vol. 7, No. 3,  
March 1958

KOZINKA, V.

E. Petru and R. Retovsky's Rostlinne explantaty (Plant Explantations); a book review.

p. 697 (BIOLOGIA) Vol. 11, no. 11, 1956,  
Bratislava, Czechoslovakia

SO: Monthly Index of East European Accessions (EEAI) LC, Vol. 7, No. 3,  
March 1958

KOZINŤKA, V.

Contribution to the physiology of plants cultivated in packages to accelerate their growth.

P. 481, (Biologie) Vol. 12, no. 7, 1957, Praha, Czechoslovakia

SO: Monthly Index of East European Accessions (EEAI) Vol. 6, No. 11 November 1957

KOZINKA, V.

"An experimental contribution to the physiology of precultivation of plants in earth cubes"

Biologicke Prace. Bratislava, Czechoslovakia. Vol. 5, no. 1, 1959

Monthly list of East European Accessions (EEAT), LC, Vol. 8, No. 7, July 59, Unclas

KOZINKA, Vladimir; MICHALKOVA, Viera

A study of the effect of phytoncides of *Allium sativum* L. on the development of the root system of *Cucumis sativus* L.; necrotic phenomena on the radicle. In German. *Biologia* 15 no.2:103-109 '60.  
(EBAI 9:5)

1. Institut für Pflanzenphysiologie, Institut für systematische Botanik und Geobotanik, Komensky Universität, Bratislava.  
(ROOTS (BOTANY) (ANTIBIOTICS) (GARLIC) (CUCUMBERS))

KOZINKA, Vladimir

The extraction of sap for cryoscopic measuring of osmotic pressure in plants; an experimental contribution of studies of the effect of killing by chloroform vapors, on the lowering of the freezing point of the extracted sap. Biologia 15 no.8:567-583 '60. (EEAI 10:4)

1. Pobočka Československé akademie polnohospodárstva, Oddelenie ochrany lesa, Banská Štiavnica.

(PLANTS)  
(OSMOSIS)  
(CRYOSCOPY)  
(SAP)



KOZINKA, Vladimir

Instruction on methods of studying the water regime of plants.  
Biologia 15 no.9:715-717 '60. (EEAI 10:4)  
(PLANTS)

KOZINKA, Vladimir; NIZNANSKY, Augustin

Biometric analysis of the relationship between the osmotic pressure of the cell sap and its refractive index. *Biologia plantarum* 5 no.1:77-84 '63.

1. Department of Plant Physiology, Institute of Biology, Slovak Academy of Sciences, Bratislava IX, Dubravska cesta 26.

KOZINKA, V.

Curve of the osmotic pressure of cell sap in falling leaves of tree species. Fiziol. rast. 10 no.1:48-54 Ja-F '63. (MIRA 16:5)

1. Department of Plant Physiology, Institute of Biology Slovak Academy of Sciences, Bratislava, Czechoslovakia.  
(Plant cells and tissues) (Osmosis) (Abscission (Botany))

CZECHOSLOVAKIA

KOZINKA, Vladimir, KLASOVA, Albina, and NIZNJANSKI, Augustin; Department of Plant Physiology of the Botanical Institute of The Slovak Academy of Sciences (Oddelenie fyziologie rastlin Botanického inštitutu SAV,) Bratislava.

"Changes in Physiologic Regulation of Plant Transpiration Ascribable to Industrial Pollutants."

Bratislava, Biologia, Vol 18, No 8, 1963; pp 565-578.

Abstract [Russian article; German summary modified]: Histologic and metabolic studies of effect of some fluorine compounds commonly present in industrial pollutants onto *Cucumis sativa* L., applied as spray or in powder form. The changes in intensity of stomatal and cuticular transpiration were of greater importance than actual total effect on transpiration as such. The stomata closed and cuticular lesions appeared. When they are wet, trichomes lose their protective capacity. Five tables, 5 graphs; 8 photomicrographs; 1 Czech, 2 Soviet and 23 Western references.

1/1

L 00291-66

ACCESSION NR: AP5023862

CZ/0049/64/000/011/0809/0819

AUTHOR: Kozinka, Vladimir (Doctor of natural sciences)(Bratislava)

TITLE: Changes of transpiration intensity caused by 2-methyl-4-chlorophenoxyacetic acid

SOURCE: Biologia, no.11, 1964, 809-819

TOPIC TAGS: transpiration, acetic acid, plant chemistry

ABSTRACT: Method of transpiration curves was used in the study of changes in the total, stomatal, and cuticular transpiration intensity of plants, provoked by 2-methyl-4-chlorophenoxyacetic acid (MCPA). K salt of MCPA was applied to 14-16 day old barley seedlings grown in water culture concentrates; the application was made either by spraying of the aerial organs, or influencing the root system. All concentrations caused lowering of the transpiration intensity. The stomatal transpiration intensity was lowered while cuticular was increased. This may be the cause for the negative water balance of the plants treated with higher concentrations of the growth substances.

Card 1/2

L 00291-66

ACCESSION NR: AP5023862

"On this place too I express my acknowledgment to Mrs. M. Takacova for her technical assistance at the execution of the experiments." Orig. art. has: 8 graphs, 2 formulas.

ASSOCIATION: Department of Plant Physiology, Botanical Institute of the Slovak Academy of Sciences, Bratislava

SUBMITTED: 13May64

ENCL: 00

SUB CODE: 18

NR REF SOV: 000

OTHER: 027

JPRS

*LW*  
Card 2/2

L 6547-66

ACC NR: AP6000773

SOURCE CODE: CZ/0049/65/000/001/0005/0013

AUTHOR: Kozinka, Vladimir (Doctor)(Bratislava)

ORG: Department of Plant Physiology, Botanical Institute of the Slovak Academy of Sciences, Bratislava (Botanisches Institut der Slowakischen Akademie der Wissenschaften Abteilung für Pflanzenphysiologie)

TITLE: Contribution to the water metabolism of *Prunus Armeniaca* L. during its apoplectic dying

SOURCE: *Biologia*, no. 1, 1965, 5-13

TOPIC TAGS: plant metabolism, plant physiology, plant development

ABSTRACT: An analysis of the negative water balance in the leaves during apoplectic dying is discussed. 3 types of water deficiency are distinguished. First type is that in which the negative water balance proceeds quickly and the leaves wilt in a few days. Study of the osmotic pressure shows that in the initial stages daily cycles are maintained. The improvement in the water content during the night, however, decreases progressively. Finally, an irreversible stage takes place. The second type shows a slow worsening of the water cycle during a whole vegetation period; in this type, individual leaves when saturated with water do not resume a full

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L 6547-66

ACC NR: AP6000773

water cycle, as is the case in the first type. The third type is fully irregular, and after periods of water deficiency, periods of normal water cycles occur again. Finally however the reversibility does not occur, and the leaves die. The author thanks Mrs. Z. Andrisova for assistance with the measurements of the water deficiencies. Orig. art. has: 8 figures. [JPRS]

SUB CODE: 06 / SUBM DATE: 14Aug64 / ORIG REF: 007 / OTH REF: 006

nw  
Card 2/2



KOZINOVA, S.

Outstanding innovator V.S. Lukasov. Mashinostroitel' no.136  
Ja '63. (MIRA 16:2)  
(Vilnius--Electric welding--Equipment and supplies)

~~KOZYKOVA, S.~~

Conveyor is in operation. Mashinostroitel' no.2:47 F '63.

(MIRA 16:3)

(Vilnius--Conveying machinery)

LEDOCHOWSKI, Andrzej; LEDOCHOWSKI, Zygmunt; RADZIKOWSKI, Czeslaw;  
WYSOCKA-SKRZELA, Barbara; KOZINSKA, Barbara; CZECHLOWSKA, Teresa;  
MICKIEWICZ, Olcha; PAC-POMARNACKA, Elzbieta

Research on tumor inhibiting compounds. XI. Roczniki chemii  
36 no.5:827-833 '62.

1. Department of Technology of Medicaments, Technical University,  
Gdansk, Laboratory No.8. Institute of Organic Synthesis, Polish  
Academy of Sciences, Gdansk, Department of Pathological Anatomy,  
Medical Academy, Gdansk.

LEDOCHOWSKI, Andrzej; KOZINSKA, Barbara; STEFANSKA, Barbara

Searching for tumor inhibiting compounds. Some N<sup>9</sup>-derivatives of methoxy methyl nitro and dimethylamino-9-aminoacridine. Roczniki chemii 37 no.12:1641-1642 '63.

1. Institute of Chemistry and Technology of Drugs, Technical University, Gdansk.

KOZINSKA, Danuta, mgr

Problems of dwelling houses for pensioners. Praca zabezp spol  
4 no.9/10:30-39 S-0 '62.

KOZINSKA, Danuta

Evaluation of the development of housing needs in connection with demographic changes; a method and example of using it. Inst bud miesz prace 15 no. 45:55-71 '64.

KOZINSKA, H.

SCIENCE

Periodical: KOSMOS. SERIA A: BIOLOGIA. Vol. 8, no. 11, 1957, In English.

KOZINSKA, H. Some properties and miscibility of crystals  $CIX$ ,  $BrX$ ,  $IX$   
where  $X =$ . p. 1.

Monthly List of East European Accessions (EEAI), LC, Vol. 8, No. 3, May 1959  
Unclass.

KURCZYŃSKA, Polagia; KOZIRSKA, Jolanta

Studies on rubber aging resistance in moderate climate and in the humid tropics. Polimery tworzyw wielk 9 no.5:131-185 My'64.

1. Institute of the Rubber Industry, Warsaw.



KOZINSKA, MARIA

WEISS, Marian; MILKOWSKA, Alicja; KOZINSKA, Maria

Conservative treatment of scoliosis, in the light of electromyographic data. Chir. narz. ruchu 22 no.2:197-209 1957.

1. Z Kliniki Ortopedycznej A. M. w Warszawie i ze Szpitala Chirurgii Kostnej w Konstancinie Kierownik: prof. dr A. Gruca Z Zakladu Leczniczego Usprawniania A. W. F. w Warszawie Kierownik: z-ca prof., kand. nauk M. Weiss Z Centralnej Poradni Miedzyszkolnej w Warszawie Kierownik: dr K. Sokal. Konstancin k/Warszawy, Szpital Chirurgii Kostnje.

(SCOLIOSIS, ther.

conservative, based on electromyographic data of misc. funct. (Pol))

(ELECTROMYOGRAPHY, in var. dis.

scoliosis, value of data on misc. funct. in conservative ther. (Pol))

L 46935-66 EWT(1) JRF(c) WW/GG

SOURCE CODE: UR/0181/66/008/005/1621/1622

58  
B

ACC NR: AP6015495

AUTHOR: Uritskiy, Z. I.; Shuster, G. V.; Kozinskaya, A. I.

ORG: Ural State University im. A. M. Gor'kiy, Sverdlovsk (Ural'skiy gosudarstvennyy universitet)

TITLE: On the theory of <sup>2/</sup>light absorption by carriers in a <sup>2/</sup>quantized magnetic field

SOURCE: Fizika tverdogo tela, v. 8, no. 5, 1966, 1621-1622

TOPIC TAGS: light absorption, carrier scattering, resonance scattering, cyclotron resonance

ABSTRACT: An expression for the light absorption coefficient is developed for the case where the principal scattering mechanism is the scattering of the current carriers on an ionized admixture, which apparently takes place at low temperatures. It appears that the coefficient of radiation absorption in a quantized magnetic field has resonance peaks when  $\omega_k = \omega_c n$ , where  $\omega_k$  is the photon frequency. When  $n=1$ , the resonance coincides with the cyclotron resonance. It follows that the cyclotron resonance line cannot be determined by this type of scattering. This confirms a previously derived conclusion for the case where the scattering takes place on phonons. Orig. art. has: 3 formulas.

SUB CODE: 20/

SUBM DATE: 29Nov65/

ORIG REF: 002

Card 1/1 *all in*

KOZINSKI, A. W.

New method of absorption of influenza antibodies. Med. dosw.  
mikrob. 3 no.1:77-82 1951. (CML 20:11)

1. Of the National Institute of Hygiene in Warsaw.

1  
1.1  
KOZINSKI, A. W.

Effect of cellular fractions of *Salmonella typhi* on erythrocyte agglutination by influenza virus. *Med. dosw. mikrob.* 3 no.1:83-94 1951. (GIML 20:11)

1. Of the National Institute of Hygiene in Warsaw.

KOZINSKI, A. W.; MIKULASZEK, E.

Attempt of purification of influenza inhibitor in the egg white.  
Med. dosw. mikrob., Warsz. 3 no. 3:242-254 1951. (CMLL 21:3)

1. Of the National Institute of Hygiene in Warsaw and of the  
Institute of Medical Microbiology of the Medical Academy, Warsaw.

CA

11 H

The inhibition of typhoid phage by antigenic complexes from *Salmonella typhosa*. A. W. Kosiński and M. Macierewicz (Państwowy Zakład Hig., Warsaw, Poland). *Med. Doświadczalna i Mikrobiol.* 3, 265-70(1951).--A study was made of the action on typhoid phages of polysaccharide-lipideprotein complex (I) and polysaccharides isolated from *S. typhosa* (D<sub>1</sub> type phage and J type phage, resp.) (cf. Mikulaszek and Ratoński, *Med. Doświadczalna i Społeczna* 25, 66(1946)), both in soln. and when adsorbed on the surface of erythrocytes. In soln., I inhibits most strongly the specific phage for the type of bacteria from which it is isolated. Adsorption of I on chicken erythrocytes increases the inhibition, probably owing to its spreading over larger surface. L-Tryptophan has no effect. At 37°, there was reaction between adsorbed I and phages in 5 min.; the reaction is much slower at 0°. The electron microscope shows phage particles adsorbed on the surface of the erythrocytes. Polysaccharides sepd. from I and from the rest of the bacteria, either in soln. or adsorbed on erythrocytes, at 0°-37°, cause no inhibition, with and without added tryptophan.

I. Z. Roberts

KOZINSKI, A.W.;WALKOWSKA, E.

Modification of Hiert hemagglutination inhibition reaction, excluding nonspecific inhibitors. Med. dosw. mikrob., Warsz. 4 no. 1:95-104 Jan-Mar 1952. (CLML 22:4)

1. Of the National Institute of Hygiene in Warsaw.

KOZINSKI, A.W.; MIKULASZEK, E.

Adsorption of gran-negative endotoxic symplexes on the surface of erythrocytes; role of polysaccharide fractions. Med. dosw. mikrob., Warsz. 4 no. 2:177-186 1952. (CML 22:4)

1. Of the National Institute of Hygiene in Warsaw and of the Institute of Medical Microbiology of Warsaw Medical Academy.



KOZINSKI, A.W.; MIKULASZEK, E.; SLAVIK, K.

Adsorption of gram-negative endotoxic symplexes on the surface of erythrocytes; utilization of erythrocytes-fixation in the investigation and elution of protein fractions of endotoxic symplex. Med. dosw.mikrob., Warsz. 4 no. 2:187-196 1952.

(CUMu 22:4)

1. Of the National Institute of Hygiene in Warsaw and of the Institute of Medical Microbiology of Warsaw Medical Academy and of the Central Laboratory of State Faculty Hospital in Prague, Czechoslovakia.

KOZINSKI, A.W.;SLONIM, D.

Effect of Salmonella typhosa fractions on viral hemagglutination;  
gradient of inhibition. Med. dosw. mikrob., Warsz. 4 no. 2:217-225  
1952. (GLML 22:4)

1. Of the National Institute of Hygiene in Warsaw and of the Institute of Microbiology and Immunology of Charles University, Prague.

KOZINSKI, A., MIKULASZEK, E.

Attempted isolation of influenza inhibitor from egg white. Med.  
dosw. mikrob., Warsz. 4 no. 3:382-383 1952. (CMLL 23:3)

1. Summary of work progress presented at 11th Congress of Polish  
Microbiologists held in Krakow May 1951. 2. Warsaw.

KOZINSKI, A.; WALKOWSKA, E.

Modified method of inhibition of Hirst's hemagglutination reaction  
(exclusion of atypic inhibitors). Med. dosw. mikrob., Warsz. 4 no.  
3:383-384 1952. (GIML 23:3)

1. Summary of work progress presented at 11th Congress of Polish  
Microbiologists held in Krakow May 1951. 2. Warsaw.

KOZINSKI, A. W.

A method to isolate the influenza pathogen. Polski tygod. lek.  
7 no. 11-12:324-325 24 Mar 1952. (CLML 22:4)

1. Of the Department of Virusology of the National Institute of  
Hygiene in Warsaw.

KOZINSKI, A.W.

(3)

Experiments with virus substrates. Nature of the "receptor gradient". A. W. Kozinski, M. Mikulaszek, and K. Sitek (*Bull. Acad. Polon. Sci.*; II, 1953, I, 31-36).—Viruses (mumps, Newcastle disease, influenza PR8 and Lec), on the basis of their elution from chicken, guinea pig, and human r.b.c. may be arranged in a series corresponding to the "receptor gradient". Using the r.b.c. of sheep the order of elution of the viruses is reversed and does not conform to the "receptor gradient". This finding is discussed.

E. C. BUTTERWORTH

Kozinski, A.W.

Biological and chemical properties of inhibitors for influenza virus in garglings from upper respiratory tracts. A. W. Kozinski (State Inst. Hyg., Warsaw), *Bull. acad. polon. sci., Classe II*, 1, 45-51 (1953) (in English). The inhibiting effect of throat garglings is related to a polysaccharide-protein complex. This complex is destroyed by periodate and pptd. by acetone or  $H_2O_2$  at low temp. The absorption in ultraviolet reaches its max. at 2650 Å. Fresh garglings lose their activity when heated at 57°. No loss in activity is observed when the garglings are preheated to 70° or pptd. with acetone. The inhibitor can be absorbed by erythrocytes coated with inactivated virus. It is decompd. by influenza, mumps and the Newcastle disease viruses; with the liberation of carbohydrates, but not of amino acids. Anna S. Szesniak

KOZINSKI, A.W.;MIKULASZEK, E.;SITEK, K.

Studies on the receptor gradient. Med. dosw. mikrob. 5 no.4:457-464  
1953. (CIML 25:5)

1. Of the Institute of Medical Microbiology of Warsaw Medical Academy  
and of the State Institute of Hygiene in Warsaw.

72601



K. O. 2115.101, A. W.

Isolation and purification of antigen VI from typhoid bacteria  
(*Salmonella typhosa*). A. W. Kuzinski, M. Maciejewicz, E. Mikul-  
laszek, and Z. Oparski. *Polon. Sci.* 1954, 2, 33-37.

Agar cultures of strains 779 and S6 of *S. typhosa* were washed with a buffered NaCl solution at pH 7.2 and 37°. The bacterial cells were then sedimented and the supernatant precipitated with cold ethanol or acetone in excess. The resulting sediment was dissolved fractionally in redistilled water. The 1st readily soluble fraction (native prep.) was biologically inactive when tested by adsorption of specific phage VI to r.b.c. sensitised with this prep. and by the inhibition reaction of viral haemagglutination with mumps, NDV, and influenza viruses. Subsequent native prep. were biologically active as also was a further prep. isolated from the bacteria remaining after the first process, by shaking them with a buffered solution at pH 8.7 at 20° and dialysing the supernatant against several changes of water. These native prep. strongly inhibited virus haemagglutination, and r.b.c. sensitised with these prep. agglutinated only with anti-VI sera. Using the method of diffusion precipitation in agar layers, these prep. were observed to contain two precipitating components. By fractional precipitation with acetone, 8 fractions were obtained from the native prep. All showed increases in immunological activity and in the activity towards specific phage and animal virus. One of these fractions (50% acetone) was found by diffusion precipitation to be immunologically homogeneous giving a single precipitation band and had a high coeff. of purity. Chromatographic analyses showed the presence of galactose, glucose, and xylose in the hydrolyzates of these fractions and in the native prep. but no mannose or rhamnose which are always present in the hydrolyzates of the somatic antigens of typhoid bacteria.

A. Ackroyd.

KOZINSKI, R.A.W.

Substrates of bacterial viruses. Reversibility of reaction and destruction of substrate. A. W. Kozinski and Z. Opata (*Bull. Acad. Polon. Sci.*, 1954, 2, 30-34). Using the method of phage adsorption on r.b.c. sensitized with typhoid VI prep., the existence of a substance with properties of a phage substrate could be demonstrated. Phage could be eluted from the r.b.c. sensitized with the substrate by heating at 37° so that concn. and purification could be achieved analogous to the purification of influenza, mumps, and NDV viruses. It is considered that this substance or substances which are found on the surface of the typhoid bacteria, regulate the phage adsorption to the cells and, after their destruction, the phage penetrates into the cells. A. ACKROYD.

gaw

KOZIN'SKI, A. W.

**POL.**  
Adsorption of antigen V<sub>1</sub> on the surface of erythrocytes. A. W. Kozinski and Z. Opark. *Bull. Acad. Polon. Sci.* 1964, 2, 91-97.  
The presence of electrolytes is essential for the adsorption of V<sub>1</sub> antigen onto r.b.c. Sensitized r.b.c. liberate this antigen by washing with electrolyte-free soln. (purification by elution). Proteins, especially albumin, potentially inhibit the adsorption of V<sub>1</sub> antigen onto the surface of r.b.c. The free NH<sub>2</sub> groups and the lipids and polysaccharides on the surface of r.b.c. are not essential for the adsorption of V<sub>1</sub> antigen. Probably the blocking of hemagglutination and checking of hemolysis are similar to the overlapping reaction. B. Vinsky.

KOZINSKI, Andrzej; MACIUREWICZ, Maria; MIKULASZEK, Edmund; OPARA, Zofia

Isolation and purification of Salmonella typhosa antigen Vi. Med.  
dosw. mikrob. 6 no.2:161-168 1954.

1. Z Zakladu Mikrobiologii Lekarskiej Akademii Medycznej w  
Warszawie i z Dzialu Biochemii Panstwowego Zakladu Higieny w  
Warszawie.

(SALMONELLA TYPHOSA,

\*antigen Vi, isolation & purification)

(ANTIGENS AND ANTIBODIES,

\*Salmonella typhosa antigen Vi, isolation & purification)

KOZINSKI, Andrzej W.; OPARA, Zofia

Reaction of antigen Vi with the surface of the erythrocyte.  
Med. dosw. mikrob. 6 no.2:169-180 1954.

1. Z Działu Biochemii Państwowego Zakładu Higieny w Warszawie i  
Zakładu Mikrobiologii Lekarskiej Akademii Medycznej w Warszawie.  
(ANTIGENS AND ANTIBODIES,

\*antigen Vi, reaction with surface of erythrocyte)  
(ERYTHROCYTES,  
\*reaction of surface with antigen Vi)

KOZINSKI, ANDRZEJ WLADYSLAW

KOZINSKI, Andrzej Wladyslaw; OPARA, Zofia

Studies on substrates for bacterial viruses. I. Reversibility of reaction and decomposition of substrate. Med. dosw. mikrob. 6 no. 3:253-263 1954.

1. Z Działu Biochemii Państwowego Zakładu Higieny w Warszawie i z Zakładu Mikrobiologii Lekarskiej Akademii Medycznej w Warszawie.  
(BACTERIOPHAGE,  
substrates)

KOZINSKI, Andrzej

Studies on virus substrates. Postepy hig. med. dosw. 8 no.3:323-335 1954.

1. Panstwowy Zaklad Higieny, Dzial Biochemii. Warszawa, ul. Chocimska 24.

(VIRUSES,  
substrates)

~~100~~. KOZINSKI, A. W.

A. W. KOZINSKI, Z. OPARA:-- Experiments with bacterial virus substrates. V.  
Destruction of substrate by active and UV-inactivated virus.

SO: Medycyna Doświadczalna I Mikrobiologia (Experimental Medicine and Microbiology)  
Fourth quarter 1955.



KOZ / MS KI, H.W.

1778. Influence of electrolytes on the adsorption of bacteriophage on erythrocytes sensitized with antigen. VI. Bacteriophage elution by electrolyte-free liquids. A. W. Kozidzi and Z. Oparski. *Bull. Acad. Polon. Sci.*, 1953, 3, 51-53 [POLISH Acad. of Sci., Inst. of Biochem., Dept. of Immunochemistry and Dept. of Microbiology, Sch. of Medicine, Warsaw]—Bacteriophage VI adsorbed on sensitized r.b.c. is eluted with an electrolyte-free liquid (5% glucose) at a low temp. The quantity of phage eluted is the same as that from enzymic elution at 37°.

E. C. BUTTERWORTH.

①

KOZINSKI, A. W.

3149. Substrates for bacterial viruses. V. Comparison of destruction of substrate by live phage and phage inactivated by ultraviolet rays. VI. Determination of temperature of inactivation of enzymic activity, viability of phage, and its ability to sensitise to passive phage haemagglutination. A. W. Kozinski and Z. Opara *Bull. Acad.*

*Polon. Sci.*, 1955, 3, 123-126, 127-132 (Dept. of Immunochemistry of the Inst. of Biochem., Polish Acad. of Sci. and Dept. of Microbiology, Sch. of Med., Warsaw).—V. No differences are observed in the velocity of substrate destruction by live phage and by phage inactivated with u.v. rays.

VI. The critical temp. of phage viability and enzyme inactivation is between 70-69° and 72-49° and the ability of phage to sensitise to passive haemagglutination disappears at 65-70°.

E. C. BUTTERWORTH. (1)

GRUZEWSKI, Aleksander; KOZINSKI, Andrzej; OPARA, Zofia

Investigations on substrates for bacterial viruses. II. Quantitative principles of reactions of phage with erythrocytes sensitized with substrates. Med. dozw. mikrob. 7 no.1:97-103 1955.

1. Z Pracowni Immunochemii Zakładu Biochemii PAN, Zakładu Mikrobiologii Lekarskiej A.M. w Warszawie i Instytutu Matematycznego PAN.

(BACTERIOPHAGE,

reaction with erythrocytes sensitized with substrates)

(ERYTHROCYTES,

reaction with bacteriophage of erythrocytes sensitized with substrates)

KOZINSKI, Andrzej W.; OPARA, Zofia

Investigations on substrates for bacterial viruses. IV. Effect of temperature and of specific anti-phage serum on phage hemagglutination reaction. Med. dosw. mikrob. 7 no.3:305-309 1955.

1. Z Pracowni Immunochemii Zakladu Biochemii PAN i Pracowni Wirusologicznej Zakladu Mikrob. Lek. A.M. w Warszawie.

(IMMUNE SERUM,  
anti-phage specific serum, eff. on bacteriophage  
hemagglut.react.)  
(BACTERIOPHAGE  
eff. of anti-phage specific serum & temperature  
on bacteriophage hemagglut.reaction.)  
(TEMPERATURE, effects,  
on bacteriophage hemagglut.reaction)  
(HEMAGGLUTINATION,  
bacteriophage hemagglut.reaction, eff. of tempera-  
ture & specific anti-phage serum.

KOZINSKI, Andrzej W.; OPARA, Zofia

Investigations on substrates for bacterial viruses. V. Comparative investigation on substrates decomposed by living and ultraviolet-irradiated phages. Med.dosw.mikrob.7 no.4:445-449 1955.

1. Z Pracowni Immunochemii Zakl.Biochemii PAN i Pracowni Wirusologicznej Zakl.Mikrobiologii Lek. A.M. w Warszawie.

(BACTERIOPHAGE, effect of radiations on, ultraviolet rays, destruction of substrate by living & irradiated phages)

(ULTRAVIOLET RAYS, effects, on bacteriophage, destruction of substrate by living & irradiated phages)

KOZINSKI, Andrzej, W.; OPARA, Zofia

Investigations on substrates for caterial viruses. VI. Determination of temperature inactivating enzymatic activity, of viability, and of sensitizing capacity for passive phage hemagglutination. Med.dosw.mikrob. 7 no.4:451-455 1955.

1. Z Pracowni Immunochemii Zakladu Biochemii PAN i Pracowni Wirusologicznej Zakladu Mikrobiologii Lekarskiej A.M. w Warszawie.

(BACTERIOPHAGE,

temperature inactivating enzymatic funct.,  
viability & sensitizing capacity for passive  
phage hemagglut)

(TEMPERATURE, effects,

on phage enzymatic activity, viability &  
sensitizing capacity for passive phage hemag-  
glut.)

(HEMAGGLUTINATION,

passive phage hemagglut.,eff. of temperature)

KOZINSKI, A.W.

4168. Substrates of bacterial viruses. VII. Influence of antiphage serum on the destruction of antigen VI by phage lysates. A. W. Kozinski and Z. Opara *Bull. Acad. polon. Sci.*, 1956, 4, 19-22 (Dept. of Immuno-chemistry, Inst. of Biochemistry, Polish Academy of Sciences).—In phage lysate, besides complete infectious phage, there exists an enzymic agent which destroys the phage substrate. This agent possesses an identical serological specificity to that of the bacteriophage and is neutralised by homologous antiphage sera. In agreement with previous findings, this is an incomplete and non-infectious form of the virus having a different sedimentation const. 2

Kozłowski, A.W.

6687. Co-precipitation of lipids with bacterial antigens. A. W. Kozłowski, E. Mikulaszek, and Z. Opara *Bull. acad. polon. Sci.*, 1958, **6**, 23-24 (Dept. of Microbiol., Sch. of Med., Warsaw).—An investigation was made of the phenomenon of co-pptn. observed when mixed systems are formed: antigen V—lipidic antigen—VI serum. It was observed that some bacterial antigens whose nature is unknown or disputable, form, in the presence of Wassermann's antigen and cholesterol, mixed ppt. Several experiments were carried out in order to elucidate this serological system which was tested by quant. pptn. tests. At the same time the amounts of protein, polysaccharide, nucleoprotein, and, as a co-precipitating agent, cholesterol, were determined in the ppt. B. VINBY.



KOZŁUSKI, A. W. & PIETRZYKOWSKA, I.

It was shown that bactericidal substances are produced as a result of UV irradiation; these substances are destroyed by catalase and are probably org. peroxides which are intensely active as mutagens and as inducers in the lysin of lysogenic bacteria.

P. HAAS

2/2

KOZINSKI, Andrzej, W.; OPARA, Zofia

Studies on substrates of bacterial viruses. VII. Effect of anti-phage serum on decomposition of Vi antigen by phage lysates. Med. dow. mikrob. 8 no.1:73-77 1956.

1. Z Pracowni Immunochemii Zakladu Biochemii P. A. N. i Pracowni Wirusologii Zakladu Mikrobiologii Am M. w Warszawie.

- (IMMUNE SERUMS, effects,  
anti-phage serum on decomposition of Vi antigen by  
phage lysates. (Pol))
- (BACTERIOPHAGE,  
eff. of anti-phage serum on decomposition of Vi antigen  
by phage lysates. (Pol))
- (ANTIGENS AND ANTIBODIES,  
Vi antigen decomposition by phage lysates, eff. of  
anti-phage serum. (Pol))

KOZINSKI, Andrzej, W.; MIKULASZEK, Edmund; OPARA, Zofia

Coprecipitation of bacterial antigens and lipids. Med. dosw. mikrob.  
8 no.1:103-108 1956.

1. Z Pracowni Immunochemii Zakladu Biochemii P. A. H. i z  
Pracowni Wirusologicznej Zakladu Mikrobiologii Lekarskiej  
A. M. w Warszawie.

(ANTIGENS AND ANTIBODIES,

mutual precipitation with lipids. (Pol))

(LIPIDS,

mutual precipitation with antigens. (Pol))

KOZINSKI, A.W.; KUBINSKI, H.; OPARA, Z.; JASINSKA, Z.

Research on substrates for bacterial viruses; properties of phages grown on bacteria containing or devoid of antigen Vi. Acta virol. Engl. Ed., Praha 1 no.1:12-19 Jan-Mar 57.

1. Immunological Laboratory, Institute of Biochemistry, Polish Academy of Sciences; virological Laboratory, Department of Medical Microbiology, Warsaw.

(BACTERIOPHAGES

properties of phages grown on bact. containing & devoid of Vi antigen)

(ANTIGENS

bact. containing & devoid of Vi antigen, eff. on properties of phages)

KOZINSKI, Andrzej W.

Studies on the nature of lysogenesis, bacteriocytogenesis, and similar phenomena. Postepy hig. med. dosw. 11 no.1:3-26 1957.

1. Zaklad Biochemii PAN.Pracownia Immunochemii i Zaklad Mikrobiologii Lekarskiej AM Warszawa, Chalubinskiego 5.

(MICROBIOLOGY,

lysogenesis, bacteriocytogenesis, & similar phenomena, review (Pol))

ROVINSON, Jerry, 1947

Some remarks on planning in surveying enterprises. Foreign good  
86 no.9:37-38 1964.

J. Director, City Surveying Enterprise, USA.

KOZINSKI, Jozef, inz.

Covering car roofs with asphalt jute. Przegł kolej mechan  
13 no.5:139-140, 149-150 My '61.

Kozinski, M.

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547.405.2.00 : 679.864.3

Kozinski M. Dicyandiamide as a Raw Material for Moulding Powders.

"Dicyandiamid jako surowiec dla tworzyw". Przemysł Chemiczny, No. 7, 1954, pp. 338-340, 6 figs., 1 tab.

The results of research over making a moulding powder with resin obtained through the condensation of dicyandiamide with formaldehyde and such fillers as paper cellulose and wood flour. The author concludes that the best condensation conditions arise when the molecular ratio of DCDA :  $\text{CH}_2\text{O}$  = 1 : 2, the temperature equals the b.p., and period of condensation is 30 minutes. It is essential, for DCDA moulding powders with paper cellulose to use guanidine carbonate as an alkalinizing medium of  $\text{CH}_2\text{O}$ . If wood flour is employed, sodium hydroxide may replace guanidine carbonate. It was ascertained that DCDA does not, without the addition of melamine or phenol, give a high-grade moulding powder.

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M



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KOZINSKI, M.

Distr: 482c(j)

✓ Dicyandiamide as a raw product for molding materials. 15  
 III. Molding materials from molten dicyandiamids. I.  
 Brzerński, M. Kozinski, and Z. Wirpsza. *Przemysł Chem.*  
 34, 193-8 (1956) (English summary). — A new plastic molding  
 powder consisting of a reaction product of dicyandiamide  
 (I) with PhOH and HCHO was elaborated. One mole of  
 PhOH and 1 mole of I were heated in a Witt's flask with a  
 stirrer on an oil bath (200-20°, i.e., few degrees above the  
 b.p. of the melt). The clear melt got cloudy at 180-85°,  
 as melamine pptd., till a thick melt was obtained (60-70%  
 of I was converted into melamine), which hardened upon  
 cooling into a thixotropic mass contg. 20-30% of melamine.  
 The melt was condensed with HCHO and alkalinized with  
 Na<sub>2</sub>CO<sub>3</sub>·10H<sub>2</sub>O. The amt. of HCHO was calcd. as follows:  
 for each mole of PhOH in the melt 1 mole of HCHO, and  
 for each mole of I, 2 moles of HCHO were used. The con-  
 densation was performed at a temp. ≤ b.p. of the mixt. for  
 20 min., cooled rapidly, and then condensed under a pres-  
 sure ≥ 120 mm. Hg, temp. ≤ 85°, till a brittle and nontacky  
 product was obtained. This (100 parts) was mixed with  
 80 parts wood flour, 1.8 parts Zn stearate or stearic acid,  
 and colors and pigments. This mixt. was calendered, with  
 the first roller at 60-70° and the second at 120-130°, till  
 it stopped sticking to the rollers. L. G. Manlius

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KOZINSKI, W.

The effect of sodium salicylate on the growth of bacteria which cause rheumatic fever. O. Bermanova, W. Gall, and W. Kozinski. *Acta Otolaryngologica et Aethriologica*, 5, 282 (1934). *Abstracts* isolated from rheumatic fever patients are susceptible to sodium salicylate (1). Serial transfer of cultures into media contg. 1 shows progressive increase in their growth due to adaptation. I. Z. Roberts

ROZINSKI, WISLAW.

TECHNOLOGY

ROZINSKI, WISLAW. Ramien w architekturze. Mirk, Jerzy; Gips w budownictwie i architekturze. Szolginia, Witold: Veranika architektoniczna. Warszawa, Budownictwo i architektura, 1955. 139 s.

Monthly List of East European Accessions (EIA) IC Vol. , no. 5  
May 1959, Unclass.

YOZINSKI, W.

The European career of the marble from Dabnik. p. 156.

PRACE GEOLOGICZNE. (Wydawnictwa Geologiczne)  
Warszawa, Poland. Vol. 7, no. 4, Apr. 1959.

Monthly list of East European Accessions (EAI) LC. Vol. 4, No. 7, July 1959

Uncl.

RUZICKI'S, W., K. ALINKIEWICZ, AND KIEPUSZEWSKI, B.

Noze Fellowa (Fellow's Cutting Tools); a book review. p.144  
MECHANIK. (Stowarzyszenie Inzynierow i Technikow Mechanikow Polskich)  
Warszawa, Poland. Vol.32, no.3, March 1959

Monthly List of East European Accessions Index, (EEAI) LC, Vol.8, no.6  
June 1959  
Uncl.

DZWONKOWSKI, Kazimierz (Warszawa); KOZINSKI, Wieslaw (Warszawa);  
WISLICKI, Alfred (Warszawa)

Mechanization of finishing works. Przegl budowl i bud  
mieszk 34 no.9:544-548 S '62.

KOZINSKIY A.V

POLAND/Virology - Bacterial Virus (Phages)

D-1

Abs Jour : Ref Zhur - Biologiya, No 7, 10 April 1957, 26075

Author : Kozinskiy, A.V., Opara, Z.

Inst : Academy of Sciences, Poland

Title : Studies of Substrata for Bacterial Virus. VII. The  
Effect of Antiphage Serum on the Decomposition of Antigen  
Vi, Caused by Phage Lysates.

Orig Pub : Byul. Pol'skoy AN, 1956, otd. 2, 4, No 1, 21-24

Abst : See Referat Zhur Biol., 1957, 328

Card 1/1

KOZINSKIY, A.V.

USSR/Virology - Bacterial Viruses.

E-1

Abs Jour : Ref Zhur - Biol., No 3, 1958, 9639

Author : Kozinskiy, A.V. Kubinskiy, G. Opara, Z. Yasinskaya, S.

Inst :

Title : Investigation of Substrates for Bacterial Viruses.  
Properties of Phages which Multiply on Bacteria which DO  
or Do Not Contain Vi Antigen.

Orig Pub : Byul. Pol'skoy AN. Otd. 2, 1956, 4, No 9, 327-334

Abstract : Phage Vi-1 multiplied on cultures of Salmonella typhi,  
which contain Vi-antigen (phagolysate FTy), and also on a  
culture of E. freundii, in which this antigen is absent  
(phagolysate FEf). Phagolysate FEf can cause decomposi-  
tion of Vi-antigen only to a minor degree, while the pha-  
golysate FTy gave rise to marked decomposition of this  
antigen. The above-mentioned phages differed from one  
another by the speed of their elution from erythrocyte  
surfaces which were sensitized by Vi-antigen. Phage

Card 1/2

USSR/Virology - Bacterial Viruses.

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E-1

Abs Jour : Ref Zhur - Biol., No 3, 1958, 9639

FTy eluted rapidly-- in 0-30 minutes; phage FEf did not  
elute in the first 4 hours. The data obtained show that  
the host cell exerts a substantial influence on the syn-  
thetic course and the properties of virus particles.  
The method of phage titration is given in the supplement,  
which represents an original modification of the Khorvat-  
Alfeldi method.

Card: 2/2



KOZINSKIY, A.V.

POLAND/Virology - Bacterial Viruses.

E-1

Abs Jour : Ref Zhur - Biol., No 3, 1958, 9640

Author : Kozinskiy

Inst : -

Title : Investigation of Virus Substrates.

Orig Pub : Zesz. probl. nauki polsk., 1956, No 7, 41-95. Dyskus. 235-277

Abstract : Results are given of studies on receptors substances which possess substrate properties for virus enzymes. A method was established which permits observations of reversible reactions between the vitus and the receptor. The method is based on the removal of the intermediate product of erythrocyte-substrate-phage. A method was established for obtaining and purification of Vi substrates; its identity with the serologically active component was proven. The reaction of Vi component with erythrocytes, the effect of electrolytes on adsorption, and the formation of a

Card 1/4

POLAND/Virology - Bacterial Viruses.

E-1

Abs Jour : Ref Zhur - Biol., No 3, 1958, 9640

complex with lipids are described. The absence of a polysaccharide component in Vi-antigen was indicated. The enzymatic decomposition by phage of the receptor group of Vi-antigen, which conditions reaction with the phage, was substantiated. It was shown that irrespective of activity loss after the phage effect, the Vi-antigen retains its serological properties unchanged. This indicates that the phage breaks away only a small receptor group from the Vi-antigen particle. It was shown that the phage adsorption on Vi-antigen sensitized erythrocytes occurs in accordance with the adsorption isotherm. A method was established for phage purification by its elution from erythrocytes sensitized by Vi-antigens, similar to the method used for grippe virus. In bacterial cultures after infection by phage a disappearance of substrate is observed, similar to substrate disappearance for animal viruses in tissues. The significance of electrolytes is shown in the reaction

Card 2/4

POLAND/Virology - Bacterial Viruses.

E-1

Ab's Jour : Ref Zhur - Biol., No 3. 1958, 9640

between phage and substrate. A method was established for passive hemagglutination of phage particles, in which erythrocytes, after phage adsorption on their surface, are agglutinated by an anti-phage serum. It was established that the minimum quantity of phage particles on one erythrocyte for the onset of hemagglutination is 6-7. A number of data were obtained which indicate the location of phage enzyme at the tip of its extension. The phage neutralization by a specific serum, in the author's opinion, depends on blocking this group by an antibody. It was shown that sera which neutralize the phage simultaneously inhibit its enzymatic activity. Sera which yield cross reactions of neutralization also yield a cross reaction of passive hemagglutination and a cross reaction of enzyme inactivation. It was found that temperature points of thermal phage inactivation and its enzyme activity coincide, which in all likelihood (0.99) indicates the enzyme

Card 3/4

POLAND/Virology - Bacterial Viruses.

E-1

Abs Jour : Ref Zhur - Biol., No 3, 1958, 9640

role in the activity of this virus. The phage inactivation by high temperature, the author considers, is the result of injury to their enzymes. It was shown that phages inactivated by ultra violet rays retain their enzymatic activity, which indicates damage to the phages' nucleic apparatus without destruction of its enzymes which, evidently, conditions interference and bacteriolytic properties of the phage. It is pointed out also that partially effective phages and their precursors possess the properties of combining with substrates and decompose them by their enzymes.

39 illustrations, tables and photographs are included. Bibliography, 11 references.

Card 4/4

KOZINSKIY, AV

POLAND/Virology - Bacterial Viruses.

E-1

Abs Jour : Ref Zhur - Biol., No 3, 1958, 9644

Author : Kozinskiy

Inst : -

Title : Study of the Nature of Lysogenesis, Bacteriocynogenesis,  
and Similar Phenomena.

Orig Pub : Postepy hig. i med. doswiadc., 1957, 11, No 1, 3-26

Abstract : No abstract.

Card 1/1