NOTICE: When government or other drawings, specifications or other data are used for any purpose other than in connection with a definitely related government procurement operation, the U. S. Government thereby incurs no responsibility, nor any obligation whatsoever; and the fact that the Government may have formulated, furnished, or in any way supplied the said drawings, specifications, or other data is not to be regarded by implication or otherwise as in any manner licensing the holder or any other person or corporation, or conveying any rights or permission to manufacture, use or sell any patented invention that may in any way be related thereto.
BIBLIOGRAPHIC INDEX OF USSR WORKS ON CORROSION
AND PROTECTION OF MATERIALS
by V. V. Krasnoyarskiy and F. N. Reznik

Price: $2.75
FOREWORD

This publication was prepared under contract for the Joint Publications Research Service as a translation or foreign-language research service to the various federal government departments.

The contents of this material in no way represent the policies, views or attitudes of the U. S. Government or of the parties to any distribution arrangement.

PROCUREMENT OF JPRS REPORTS

All JPRS reports may be ordered from the Office of Technical Services. Reports published prior to 1 February 1963 can be provided, for the most part, only in photocopy (xerox). Those published after 1 February 1963 will be provided in printed form.

Details on special subscription arrangements for JPRS social science reports will be provided upon request.

No cumulative subject index or catalog of all JPRS reports has been compiled.

All JPRS reports are listed in the Monthly Catalog of U. S. Government Publications, available on subscription at $4.50 per year ($6.00 foreign) including an annual index, from the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C.

All JPRS scientific and technical reports are cataloged and subject-indexed in Technical Translations, published semimonthly by the Office of Technical Services, and also available on subscription ($12.00 per year domestic, $16.00 foreign) from the Superintendent of Documents. Semannual indexes to Technical Translations are available at additional cost.
BIBLIOGRAPHIC INDEX OF USSR WORKS ON CORROSION AND PROTECTION OF MATERIALS


TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>List of Abbreviated and Complete Titles of Periodical and Continuing Publications (pages 5-12)</td>
<td>1</td>
</tr>
<tr>
<td>List of Conventional Abbreviations (page 13)</td>
<td>25</td>
</tr>
<tr>
<td>Introduction (pages 14-16)</td>
<td>28</td>
</tr>
<tr>
<td>Part I, Section 4N: Role of Protective Films in the Corrosion Process of Metals (pages 60-61)</td>
<td>34</td>
</tr>
<tr>
<td>Part I, Section 7: Soil Corrosion (pages 71-75)</td>
<td>36</td>
</tr>
<tr>
<td>Part I, Section 9: Corrosion in Aggressive Media (pages 82-87)</td>
<td>44</td>
</tr>
<tr>
<td>Part II, Section 2: Corrosion Inhibitors (Retarders) (pages 147-153)</td>
<td>53</td>
</tr>
<tr>
<td>Part II, Section 7: Preservative Coatings and Lubricants (pages 164-165)</td>
<td>67</td>
</tr>
</tbody>
</table>

- a -
<table>
<thead>
<tr>
<th>Section/Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Part II, Section 9a: Non-metallic coatings — General Questions (pages 210-213)</td>
<td>72</td>
</tr>
<tr>
<td>Part II, Section 9e: Asphalt Coatings (pages 232-234)</td>
<td>79</td>
</tr>
<tr>
<td>Part II, Section 11: Plastics in Anti-corrosion technology (pages 240-242)</td>
<td>84</td>
</tr>
<tr>
<td>Part III, Section 3: Protection of Underground Installations from Corrosion and Stray Currents (pages 252-259)</td>
<td>90</td>
</tr>
<tr>
<td>Part III, Section 5: Corrosion and Protection in the Oil-Refining Industry (pages 263-266)</td>
<td>108</td>
</tr>
<tr>
<td>Part IV: Corrosion of Non-metallic Materials (pages 268-275)</td>
<td>114</td>
</tr>
<tr>
<td>Abbreviation</td>
<td>Complete Title</td>
</tr>
<tr>
<td>-----------------------</td>
<td>---------------------------------------</td>
</tr>
<tr>
<td>Aviatsiya i khimiya</td>
<td>Aviatsiya i khimiya</td>
</tr>
<tr>
<td>Avtobronetankovyy Zh.</td>
<td>Avtobronetankovyy Zhurnal</td>
</tr>
<tr>
<td>Avtogen. delo</td>
<td>Avtogennoye delo</td>
</tr>
<tr>
<td>Avtomat. svarka</td>
<td>Avtomaticheskaya svarka</td>
</tr>
<tr>
<td>Avtomob. dorogi</td>
<td>Avtomobil'nyye dorogi</td>
</tr>
<tr>
<td>Avtotrakt. delo</td>
<td>Avtotraktornoye delo</td>
</tr>
<tr>
<td>Avtomob. i traktornaya prom-st'</td>
<td>Avtomobil'naya i traktornaya promyshlenost'</td>
</tr>
<tr>
<td>Avtomob. prom-st'</td>
<td>Avtomobil'naya promyshlenost'</td>
</tr>
<tr>
<td>Azerb. khim. zh.</td>
<td>Azerbaydzhashkiy khimicheskiy zhurnal</td>
</tr>
<tr>
<td>Azerb. neft. kh-vo</td>
<td>Azerbaydzhashkoye neftyanoye khoz-yaystvo</td>
</tr>
<tr>
<td>Anilokras. prom-st'</td>
<td>Anilokrasochnaya promyshlennost'</td>
</tr>
<tr>
<td>Artiller. zh.</td>
<td>Artilleriyskiy zhurnal</td>
</tr>
<tr>
<td>Atomnaya energiya</td>
<td>Atomnaya energiya</td>
</tr>
<tr>
<td>Abbreviation</td>
<td>Complete Title</td>
</tr>
<tr>
<td>--------------------------------------</td>
<td>----------------------------------------------------------</td>
</tr>
<tr>
<td>Beton i zhelezo-beton</td>
<td>Beton i zhelezo-beton</td>
</tr>
<tr>
<td>Brit. prom-st' i tekhn.</td>
<td>Britanskaya promyshlennost' i tekhnika</td>
</tr>
<tr>
<td>Brodil'n. prom-st'</td>
<td>Brodil'naya promyshlennost'</td>
</tr>
<tr>
<td>Bum. prom-st'</td>
<td>Bumazhnaya promyshlennost'</td>
</tr>
<tr>
<td>Byull. Vsesoyuzn. khim. o-va</td>
<td>Byulleten' vsesoyuznogo khimicheskogo obshchestva</td>
</tr>
<tr>
<td>Byull. kollektiva inzh. teplotekhn. in-ta</td>
<td>Byulleten' kollektiva inzhenerov teplo-technicheskogo instituta</td>
</tr>
<tr>
<td>Byull. neft. geofiziki</td>
<td>Byulleten' neftyanoy geofiziki</td>
</tr>
<tr>
<td>Byull. stroit. tekhni.</td>
<td>Byulleten' stroitel'nyy tekhniki</td>
</tr>
<tr>
<td>Vestn. AN SSSR</td>
<td>Vestnik Akademii nauk SSSR</td>
</tr>
<tr>
<td>Vest. AN Kazakh. SSR</td>
<td>Vestnik Akademii nauk kazakhskoy SSR</td>
</tr>
<tr>
<td>Vest. vozd. flota</td>
<td>Vestnik vozdushnogo flota</td>
</tr>
<tr>
<td>Vest. Vsesoyuzn. n.-i. in-ta zh.-d. transporta</td>
<td>Vestnik Vsesoyuznogo nauchno-issledovatel'skogo instituta zheleznozdorozhnogo transporta</td>
</tr>
<tr>
<td>Abbreviation</td>
<td>Complete Title</td>
</tr>
<tr>
<td>--------------</td>
<td>----------------</td>
</tr>
<tr>
<td>Vestn. vyssh. shkoly</td>
<td>Vestnik vysheyy shkoly</td>
</tr>
<tr>
<td>Vestn. inzh. i tekhn.</td>
<td>Vestnik inzhenerov i tekhnikov</td>
</tr>
<tr>
<td>Vestn. kom-ta po izobret.</td>
<td>Vestnik komiteta po izobreteniyam</td>
</tr>
<tr>
<td>Vestn. Leningr. un-ta</td>
<td>Vestnik Leningradskogo universiteta</td>
</tr>
<tr>
<td>Vestn. mashinostro-yeniya</td>
<td>Vestnik mashinostro-yeniya</td>
</tr>
<tr>
<td>Vestn. metallo-promyshlennosti</td>
<td>Vestnik metallo-promyshlennosti</td>
</tr>
<tr>
<td>Vestn. Mosk. un-ta</td>
<td>Vestnik Moskovskogo universiteta</td>
</tr>
<tr>
<td>Vestn. standartizatsii</td>
<td>Vestnik standartizatsii</td>
</tr>
<tr>
<td>Vestn. elektro-prom-sti</td>
<td>Vestnik elektro-promyshlennosti</td>
</tr>
<tr>
<td>Voprosy kommun. kh-va</td>
<td>Voprosy kommunalnogo khozyaystva</td>
</tr>
<tr>
<td>Vost. neft'</td>
<td>Vostochnaya neft'</td>
</tr>
<tr>
<td>Abbreviation</td>
<td>Complete Title</td>
</tr>
<tr>
<td>-----------------------</td>
<td>------------------------------------------------------</td>
</tr>
<tr>
<td>VUGI</td>
<td>Vsosoyuznyy ugolnyy institut</td>
</tr>
<tr>
<td>Gazovaya prom-st'</td>
<td>Gazovaya promyshlennost'</td>
</tr>
<tr>
<td>Geodeziya i kartografiya</td>
<td>Geodeziya i kartografiya</td>
</tr>
<tr>
<td>Gigiyena truda</td>
<td>Gigiyena truda</td>
</tr>
<tr>
<td>Gidroliznaya i leso-lesokhimicheskaya promyshlennost'</td>
<td>Hydrolysis and Wood Chemistry Industry</td>
</tr>
<tr>
<td>Gidrotekn. str-vo</td>
<td>Gidroteknicheskoye stroitel'stvo</td>
</tr>
<tr>
<td>Gor. kh-vo Moskvy</td>
<td>Gorodskoye khozyaystvo Moskvy</td>
</tr>
<tr>
<td>Goryuchiye slantsy</td>
<td>Goryuchiye slantsy</td>
</tr>
<tr>
<td>Grazhd. aviatsiya</td>
<td>Grazhdanskaya aviatsiya</td>
</tr>
<tr>
<td>Grozn. neftyanik</td>
<td>Groznenskiy neftyanik</td>
</tr>
<tr>
<td>Dizelestroyeniye</td>
<td>Dizelestroyeniye</td>
</tr>
<tr>
<td>Dokl. AN SSSR</td>
<td>Doklady Akademii nauk SSSR</td>
</tr>
<tr>
<td>Dokl. AN Ukr. SSR</td>
<td>Doklady Akademii nauk Ukr. SSR</td>
</tr>
<tr>
<td>ZHil. kommun. kh-vo</td>
<td>Zhilishchno-kommunal'noye khozyaystvo</td>
</tr>
<tr>
<td>ZH. neorg. khimii</td>
<td>Zhurnal neorganicheskoy khimii</td>
</tr>
<tr>
<td>ZH. obshch. khimii</td>
<td>Zhurnal obshchey khimii</td>
</tr>
<tr>
<td>Abbreviation</td>
<td>Complete Title</td>
</tr>
<tr>
<td>--------------</td>
<td>---------------</td>
</tr>
<tr>
<td>ZH. prikl. khimii</td>
<td>Zhurnal prikladnoy khimii</td>
</tr>
<tr>
<td>ZH. rezin. prom-sti</td>
<td>Zhurnal rezinovoy promyshlennosti</td>
</tr>
<tr>
<td>ZH. russ. metallurg. o-va</td>
<td>Zhurnal russkogo metallurgicheskogo obshchestva</td>
</tr>
<tr>
<td>ZHRFKhO</td>
<td>Zhurnal russko-fiziko-khimicheskogo obshchestva</td>
</tr>
<tr>
<td>ZH. tekhn. fiz.</td>
<td>Zhurnal tekhnicheskoy fiziki</td>
</tr>
<tr>
<td>ZH. fiz. khimii</td>
<td>Zhurnal fizicheskoy khimii</td>
</tr>
<tr>
<td>ZH. khim. prom-sti</td>
<td>Zhurnal khimicheskoy promyshlennosti</td>
</tr>
<tr>
<td>Za prom. kadry</td>
<td>Za promyshlennyye kadry</td>
</tr>
<tr>
<td>Za torf. industriyu</td>
<td>Za torfyaymyu industriyu</td>
</tr>
<tr>
<td>Za ekonomiyu top-liva</td>
<td>Za ekonomiyu top-liva</td>
</tr>
<tr>
<td>Zavodsk. laboratoriya</td>
<td>Zavodskaya laboratoriya</td>
</tr>
<tr>
<td>Izv. AN SSSR OTN</td>
<td>Izvestiya Akademii nauk SSSR. Otdeleniye teknicheskikh nauk</td>
</tr>
<tr>
<td>Izv. AN SSSR. OMEN, ser. khim.</td>
<td>Izvestiya Akademii nauk SSSR. Otdeleniye matematicheskikh nauk, seriya khimi-cheskaya</td>
</tr>
<tr>
<td>Abbreviation</td>
<td>Complete Title</td>
</tr>
<tr>
<td>--------------</td>
<td>----------------</td>
</tr>
<tr>
<td>Izv. AN SSSR. OKhN</td>
<td>Izvestiya Akademii nauk SSSR. Otdel-eniyе khimicheskikh nauk</td>
</tr>
<tr>
<td>Izv. AN SSSR. OTN Metallurgiya i top-livo</td>
<td>Izvestiya Akademii nauk SSSR. Otdel-eniyе tekhnicheskikh nauk. Metallurgiya i toplivo</td>
</tr>
<tr>
<td>Izv. Azerb. fil. AN SSSR</td>
<td>Izvestiya Azerbaidzhanzhanskogo filialа AN SSSR</td>
</tr>
<tr>
<td>Izv. AN Azerb. SSR. Sеr. fiz-tekhn. i khim. n.</td>
<td>Izvestiya Akademii nauk Azerb. SSR. Seriya fiziko-tekhnicheskikh i khimicheskikh nauk</td>
</tr>
<tr>
<td>Izv. AN Latv. SSR</td>
<td>Izvestiya Akademii nauk Latv. SSR</td>
</tr>
<tr>
<td>Izv. Vsesoyuzn. teplotekhn. in-ta</td>
<td>Izvestiya Vsesoyuznogo teplotekhnicheskogo instituta im. imeni F. Dzerzhinskogo</td>
</tr>
<tr>
<td>Izv. vyssh. ucheb. zavedeniy. Khimiya i khim. tehnologiya</td>
<td>Izvestiya vysshikh uchebnikh zavedeniy. Higher Learning: Chemistry and Chemical Engineering</td>
</tr>
<tr>
<td>Abbreviation</td>
<td>Complete Title</td>
</tr>
<tr>
<td>------------------------------------</td>
<td>----------------------------------------------------</td>
</tr>
<tr>
<td>Izv. sektora fiz.-khim. analiza</td>
<td>Izvestiya sektora fiziko-khimiches-kogo analiza</td>
</tr>
<tr>
<td>Izv. Sib. otd. AN SSSR</td>
<td>Izvestiya Sibirskogo otdeleniya Akademii nauk SSSR</td>
</tr>
<tr>
<td>Izv. elektroprom.-st'i slabogo toka</td>
<td>Izvestiya elektropromyshlennost'i slabogo toka</td>
</tr>
<tr>
<td>Inform. byull. po protivokorroz. tekhnike</td>
<td>Informatsionnyy byulleten'. Tekhnika zaashchity ot korrozii</td>
</tr>
<tr>
<td>Kauchuk i rezina</td>
<td>Kauchuk i rezina</td>
</tr>
<tr>
<td>Kachestv. stal'</td>
<td>Kachestvennaya stal'</td>
</tr>
<tr>
<td>Kislorod</td>
<td>Kislorod</td>
</tr>
<tr>
<td>Kozh.-obuv. prom-st' SSSR</td>
<td>Kozhevenno-obuvnaya promyshlennost' SSSR</td>
</tr>
<tr>
<td>Koks i khimiya</td>
<td>Koks i khimiya</td>
</tr>
<tr>
<td>Kolloidn. zh.</td>
<td>Kolloidnyy zhurnal</td>
</tr>
<tr>
<td>Kommun. str-vo</td>
<td>Kommunal'noye stroitel'stvo</td>
</tr>
<tr>
<td>Konserv. prom-st'</td>
<td>Konservnaya promyshlennost'</td>
</tr>
<tr>
<td>Konservn. i ovoshchesushil'n. prom-st'</td>
<td>Konservnaya i ovoshchesushil'naya promyshlennost'</td>
</tr>
<tr>
<td>Korroz. i bor'ba's ney</td>
<td>Korroz. i bor'ba's ney</td>
</tr>
<tr>
<td>Abbreviation</td>
<td>Complete Title</td>
</tr>
<tr>
<td>--------------------------------------</td>
<td>-----------------------------------------------------</td>
</tr>
<tr>
<td>Legkaya prom-st'</td>
<td>Legkaya promyshlennost'</td>
</tr>
<tr>
<td>Legkiye metally</td>
<td>Legkiye metally</td>
</tr>
<tr>
<td>Lesokhim. prom-st'</td>
<td>Lesokhimicheskaya promyshlennost'</td>
</tr>
<tr>
<td>Liteynyoe proiz-voya prom-st'</td>
<td>Liteynyoe proizvodstvo</td>
</tr>
<tr>
<td>L'nopen'kodzhuтов-a prom-st'</td>
<td>L'nopen'kodzhuтов-a promyshlennost'</td>
</tr>
<tr>
<td>Malyarnoye delo</td>
<td>Malyarnoye delo</td>
</tr>
<tr>
<td>Masloboyno-zhiro-prom-st'</td>
<td>Masloboyno-zhiro-promyshlennost'</td>
</tr>
<tr>
<td>Mashinostroitel'</td>
<td>Mashinostroitel'</td>
</tr>
<tr>
<td>MDNTP</td>
<td>Moskovskiy dom Maiuchno-teknicheskoy propagandy</td>
</tr>
<tr>
<td>MTS</td>
<td>Mashinotraktornaya promyshlennost'</td>
</tr>
<tr>
<td>Med. prom-st'</td>
<td>Meditsinskaya promyshlennost'</td>
</tr>
<tr>
<td>Metallovedeniye i obrabotka metallov</td>
<td>Metallovedeniye i obrabotka metallov</td>
</tr>
<tr>
<td>Metallovedeniye i term. obrabotka metallov</td>
<td>Metallovedeniye i termicheskaya obrabotka metallov</td>
</tr>
<tr>
<td>Metallurg</td>
<td>Metallurg</td>
</tr>
<tr>
<td>Mekhaniz. str-stva</td>
<td>Mekhanizatsiya stroitel'stva</td>
</tr>
</tbody>
</table>

- 8 -
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Complete Title</th>
<th>English Translation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mehaniz. i motor-iz. RKKA</td>
<td>Mehanizatsiya i motorizatsiya Raboche-Krest'yanskoy Krainoy Armii</td>
<td>Mechanization and Motorization of the Worker-Peasant Red Army</td>
</tr>
<tr>
<td>Mikrobiologiya</td>
<td>Mikrobiologiya</td>
<td>Microbiology</td>
</tr>
<tr>
<td>Miner. udobr. i insektofungisidyu</td>
<td>Mineral'nyye udobreniya i insektofungisidyu</td>
<td>Mineral Fertilizers and Insectofungicides</td>
</tr>
<tr>
<td>Molochno-maslodel. prom-st'</td>
<td>Molochno-maslodel-naya promyshlennost'</td>
<td>Dairy and Butter Making Industry</td>
</tr>
<tr>
<td>Morskoy flot</td>
<td>Morskoy flot</td>
<td>Maritime Fleet</td>
</tr>
<tr>
<td>Morskoy i rechnoy flot</td>
<td>Morskoy i rechnoy flot</td>
<td>Maritime and River Fleet</td>
</tr>
<tr>
<td>Moskovolgosstroy</td>
<td>Moskovolgosstroy</td>
<td>Moscow and Volgograd Construction Trust</td>
</tr>
<tr>
<td>Motor</td>
<td>Motor</td>
<td>Motors</td>
</tr>
<tr>
<td>Nyaansya industriya SSSR</td>
<td>Nyaansya industriya SSSR</td>
<td>Meat Industry of the USSR</td>
</tr>
<tr>
<td>Nauka i zhizn'</td>
<td>Nauka i zhizn'</td>
<td>Science and Life</td>
</tr>
<tr>
<td>Nauch. dokl. vyssh. shkoly. Stroitels'tvo</td>
<td>Nauchnyye doklady vyssh. shkoly. Stroitels'tvo</td>
<td>University Scientific Reports: Construction</td>
</tr>
<tr>
<td>Abbreviation</td>
<td>Complete Title</td>
<td>English Translation</td>
</tr>
<tr>
<td>--------------------------------------------</td>
<td>-------------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Nauch. dokl. vyssh. shkoly, Khimya i khim. tekhnologiya</td>
<td>Nauchnye doklady vyshey shkoly: Khimiya i khimicheskaya tekhnologiya</td>
<td>University Scientific Reports: Chemistry and Chemical Engineering</td>
</tr>
<tr>
<td>Neft'</td>
<td>Neft'</td>
<td>Petroleum</td>
</tr>
<tr>
<td>Neft. kh-vo</td>
<td>Neftyanyye khozyaystvo</td>
<td>Oil Industry</td>
</tr>
<tr>
<td>Novaya tekhn. montazh. i spets. rabot v str-ve</td>
<td>Novaya tekhnika montazhnykh i spetsial'nykh rabot v stroitel'nykh</td>
<td>New Techniques and Equipment for Assembly and Specialized Operations in Construction</td>
</tr>
<tr>
<td>Ogneupory</td>
<td>Ogneupory</td>
<td>Fireproof Materials</td>
</tr>
<tr>
<td>Optiko-mekhan. prom-st'</td>
<td>Optiko-mekhanicheskaya promyshlennost'</td>
<td>Optical Mechanics Industry</td>
</tr>
<tr>
<td>Organizatsiya upravleniya</td>
<td>Organizatsiya upravleniya</td>
<td>Control Organization</td>
</tr>
<tr>
<td>Plastmassy</td>
<td>Plasticheskiye massy</td>
<td>Plastics</td>
</tr>
<tr>
<td>Podshipnik</td>
<td>Podshipnik</td>
<td>Bearings</td>
</tr>
<tr>
<td>Predpriyatiye</td>
<td>Predpriyatiye</td>
<td>The Factory</td>
</tr>
<tr>
<td>Priborostroyeniye</td>
<td>Priborostroyeniye</td>
<td>Instrument Making</td>
</tr>
<tr>
<td>Priroda</td>
<td>Priroda</td>
<td>Nature</td>
</tr>
<tr>
<td>Proizv.-tekhn. inform. byull. Gl. upr. metiz. prom-sti</td>
<td>Proizvodstvenno-tekhnicheskyy informatsionny byulleten'. Glavnoye upravleniya metiznoy promyshlennosti</td>
<td>Production Engineering Information Bulletin of the Main Administration of the Metalware Industry</td>
</tr>
<tr>
<td>Abbreviation</td>
<td>Complete Title</td>
<td>English Translation</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>---------------------------------------</td>
<td>-----------------------------------------</td>
</tr>
<tr>
<td>Promysl. kooperatsiya</td>
<td>Promyslovaya kooperatsiya</td>
<td>Manufacturing Cooperatives</td>
</tr>
<tr>
<td>Prom. energetika</td>
<td>Promyshevannaya energetika</td>
<td>Industrial Power Engineering</td>
</tr>
<tr>
<td>Prom. str-vo</td>
<td>Promyshevlennoye stroitel'stvo</td>
<td>Industrial Construction</td>
</tr>
<tr>
<td>Prom-st' organ. khimii</td>
<td>Promyshehlnnost' organicheskoy khimii</td>
<td>Organic Chemistry Industry</td>
</tr>
<tr>
<td>Rabochiy metallurg</td>
<td>Rabochiy metallurg</td>
<td>The Metal Worker</td>
</tr>
<tr>
<td>Redkiye metally</td>
<td>Redkiye metally</td>
<td>Rare Metals</td>
</tr>
<tr>
<td>Rechn. transport</td>
<td>Rechnoy transport</td>
<td>River Transport</td>
</tr>
<tr>
<td>Russko-germ. vestn. nauki i tekhniki</td>
<td>Russko-germanskiy vestnik nauki i tekhniki</td>
<td>Russo-German Herald of Science and Technology</td>
</tr>
<tr>
<td>Rybnoye kho-vo</td>
<td>Rybnoye khozyaystvo</td>
<td>Fisheries</td>
</tr>
<tr>
<td>Samolet</td>
<td>Samolet</td>
<td>Aircraft</td>
</tr>
<tr>
<td>Sakhar</td>
<td>Sakhar</td>
<td>Sugar</td>
</tr>
<tr>
<td>Sakharnaya prom-st'</td>
<td>Sakharnaya promyshhlnnost'</td>
<td>Sugar Industry</td>
</tr>
<tr>
<td>Svarochnoye proizvodstvo</td>
<td>Svarochnoye proizvodstvo</td>
<td>Welding</td>
</tr>
<tr>
<td>Sel'khoz mashina</td>
<td>Sel'khoz mashina</td>
<td>Farm Machinery</td>
</tr>
<tr>
<td>Signaliz. i svyaz' na zh.-d. transp.</td>
<td>Signalizatsiya i svyaz' na zhelezno- ation on Rail Transport dorozhnom transporte</td>
<td>Signalling and Communication</td>
</tr>
<tr>
<td>Sintetich. kauchuk</td>
<td>Sinteticheskii kauchuk</td>
<td>Synthetic Rubber</td>
</tr>
<tr>
<td>Abbreviation</td>
<td>Complete Title</td>
<td>English Translation</td>
</tr>
<tr>
<td>-----------------------</td>
<td>--------------------------------------------</td>
<td>-----------------------------</td>
</tr>
<tr>
<td>Sov. metallurgiya</td>
<td>Sovetskaya metallurgiya</td>
<td>Soviet Metallurgy</td>
</tr>
<tr>
<td>Sov. metropoliten</td>
<td>Sovetskiy metropoliten</td>
<td>Soviet Urban Subways and Elevateds</td>
</tr>
<tr>
<td>Sorena</td>
<td>Sorena</td>
<td></td>
</tr>
<tr>
<td>Sotsialistich. nauka i tekhnika</td>
<td>Sotsialisticheskaya nauka i tekhnika</td>
<td>Socialist Science and Technology</td>
</tr>
<tr>
<td>Sotsialistich. transport</td>
<td>Sotsialisticheskiy transport</td>
<td>Socialist Transport</td>
</tr>
<tr>
<td>Sotsialistich. rekonstruktsiya i nauka</td>
<td>Sotsialisticheskaya rekonstruktsiya i nauka</td>
<td>Socialist Remodelling and Science</td>
</tr>
<tr>
<td>Spirtovaya prom-st'</td>
<td>Spirtovaya promyshlennost'</td>
<td>Alcohol Industry</td>
</tr>
<tr>
<td>Stal'</td>
<td>Stal'</td>
<td>Steel</td>
</tr>
<tr>
<td>Standartizatsiya</td>
<td>Standartizatsiya</td>
<td>Standardization</td>
</tr>
<tr>
<td>Stanki i instrument</td>
<td>Stanki i instrument</td>
<td>Lathes and Tools</td>
</tr>
<tr>
<td>Stroit. prom-st'</td>
<td>Stroitel'naya promyshlennost'</td>
<td>Construction Industry</td>
</tr>
<tr>
<td>Stroit. materialy, izdeliya i konst-ruktaii</td>
<td>Stroitel'nyye materialy, izdeliya konstruktaii</td>
<td>Construction Materials, Items and Frames</td>
</tr>
<tr>
<td>Str-vo predpr. neft. prom-sti</td>
<td>Stroitel'stvo predpriiatiy neft-yanyov promysh-lennosti</td>
<td>Construction of Oil Industries Enterprises</td>
</tr>
<tr>
<td>Str-vo truboprovodov</td>
<td>Stroitel'stvo truboprovodov</td>
<td>Pipe Line Construction</td>
</tr>
<tr>
<td>Sudostroyeniye</td>
<td>Sudostroyeniye</td>
<td>Ship Building</td>
</tr>
<tr>
<td>Tabak</td>
<td>Tabak</td>
<td>Tobacco</td>
</tr>
<tr>
<td>Abbreviation</td>
<td>Complete Title</td>
<td>English Translation</td>
</tr>
<tr>
<td>--------------------</td>
<td>-----------------------------------------</td>
<td>---------------------------</td>
</tr>
<tr>
<td>Tankist</td>
<td>Tankist</td>
<td>Tankman</td>
</tr>
<tr>
<td>Tekstil'n. prom-st'</td>
<td>Tekstil'naya promyshlennost'</td>
<td>Textile Industry</td>
</tr>
<tr>
<td>Tekstil'n. vestn.</td>
<td>Tekstil'nyy vestnik</td>
<td>Textile Herald</td>
</tr>
<tr>
<td>Teoriya i praktika metallurgii</td>
<td>Teoriya i praktika metallurgii</td>
<td>Theory and Practice of Metallurgy</td>
</tr>
<tr>
<td>Teplo i sila</td>
<td>Teplo i sila</td>
<td>Heat and Power</td>
</tr>
<tr>
<td>Teplosilovoye kh-vo khozyaystvo</td>
<td>Teplosilovoye khozyaystvo</td>
<td>Diesel and Thermal Power</td>
</tr>
<tr>
<td>Teploenergetika</td>
<td>Teploenergetika</td>
<td>Heat and Power Engineering</td>
</tr>
<tr>
<td>Tekhnika vozdushno-go flota</td>
<td>Tekhnika vozdushno-go flota</td>
<td>Air Force Material and Technology</td>
</tr>
<tr>
<td>Tekhn. zhel. dorog</td>
<td>Tekhnika zheleznykh dorog</td>
<td>Railway Engineering</td>
</tr>
<tr>
<td>Tekhnika molodezhi</td>
<td>Tekhnika molodezhi</td>
<td>Youth Engineering</td>
</tr>
<tr>
<td>Tekhnika svyazi</td>
<td>Tekhnika svyazi</td>
<td>Communications Engineerin</td>
</tr>
<tr>
<td>Tekhn. propaganda</td>
<td>Tekhnicheskaya propaganda</td>
<td>Technical Propaganda</td>
</tr>
<tr>
<td>Torf. prom-st'</td>
<td>Torfyanaya promyshlennost'</td>
<td>Peat Industry</td>
</tr>
<tr>
<td>Tochnaya industriya</td>
<td>Tochnaya industriya</td>
<td>Precision Industry</td>
</tr>
<tr>
<td>Transp. str-vo</td>
<td>Transportnoye stroitel'stvo</td>
<td>Transport Construction</td>
</tr>
<tr>
<td>Tyazheloeye mashinostroyeniye</td>
<td>Tyazheloeye mashinostroyeniye</td>
<td>Heavy Machine Construction</td>
</tr>
<tr>
<td>Ugol'</td>
<td>Ugol'</td>
<td>Coal</td>
</tr>
<tr>
<td>Abbreviation</td>
<td>Complete Title</td>
<td>English Translation</td>
</tr>
<tr>
<td>------------------------------</td>
<td>-----------------------------------------</td>
<td>-----------------------------------</td>
</tr>
<tr>
<td>Ukr. matem. zh.</td>
<td>Ukrainskiy matematicheskiy zhurnal</td>
<td>Ukrainian Mathematical Journal</td>
</tr>
<tr>
<td>Ukr. khim. zh.</td>
<td>Ukrainskiy khimicheskiy zhurnal</td>
<td>Ukrainian Chemical Journal</td>
</tr>
<tr>
<td>Ural. metallurgiya</td>
<td>Ural'skaya metallurgiya</td>
<td>Ural Metallurgy</td>
</tr>
<tr>
<td>Uspekhi khimii</td>
<td>Uspekhi khimi</td>
<td>Advances in Chemistry</td>
</tr>
<tr>
<td>Fiz. metallov i metallovedeniye</td>
<td>Fizika metallov i metallovedeniye</td>
<td>Physics of Metals and Metals Science</td>
</tr>
<tr>
<td>Khim. nauka i prom-st'</td>
<td>Khimicheskaya nauka i promyshlennost'</td>
<td>Chemistry and Industry</td>
</tr>
<tr>
<td>Khim. prom-st'</td>
<td>Khimicheskaya promyshlennost'</td>
<td>Chemical Industry</td>
</tr>
<tr>
<td>Khim. volokna</td>
<td>Khimicheskiye volokna</td>
<td>Chemical Fibers</td>
</tr>
<tr>
<td>Khim mashinostroyeniye</td>
<td>Khimicheskoye mashinostroyeniye</td>
<td>Chemical Machine Construction</td>
</tr>
<tr>
<td>Khimiya v shkole</td>
<td>Khimiya v shkole</td>
<td>Chemistry in the School</td>
</tr>
<tr>
<td>Khimiya i tekhnol. topliva</td>
<td>Khimiya i tekhnologiya topliva</td>
<td>Chemistry and Fuel Engineering</td>
</tr>
<tr>
<td>Khimiya i tekhnol. topliv i masel</td>
<td>Khimiya i tekhnologiya topliv i masel</td>
<td>Chemistry and Fuels and Lubricants Engineering</td>
</tr>
<tr>
<td>Khimstroy</td>
<td>Khimstroy</td>
<td>Chemical Construction</td>
</tr>
<tr>
<td>Khlopch.-bum. prom-st'</td>
<td>Khlootchabumazh-naya promyshlennost'</td>
<td>Cotton Industry</td>
</tr>
<tr>
<td>Kholodil'n. tekhnikaKholodil'naya tekhn-</td>
<td></td>
<td>Refrigerator Equipment</td>
</tr>
<tr>
<td>TSvetnyye metally</td>
<td>Tsvetnyye metally</td>
<td>Non-Ferrous Metals</td>
</tr>
<tr>
<td>Abbreviation</td>
<td>Complete Title</td>
<td>English Translation</td>
</tr>
<tr>
<td>--------------</td>
<td>---------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>TSement</td>
<td>Tsement</td>
<td>Cement</td>
</tr>
<tr>
<td>Energomashinostroyeniye</td>
<td>Energomashinostroyeniye</td>
<td>Power Engineering Machine Construction</td>
</tr>
<tr>
<td>Elektr. stantsii</td>
<td>Elektricheskiye stantsii</td>
<td>Electric Power Stations</td>
</tr>
<tr>
<td>Elekrichestvo</td>
<td>Elekrichestvo</td>
<td>Electricity</td>
</tr>
<tr>
<td>Energetik</td>
<td>Energetik</td>
<td>Power Engineer</td>
</tr>
<tr>
<td>Energ. byull.</td>
<td>Energeticheskiy byulleten'</td>
<td>Power Engineering Bulletin</td>
</tr>
<tr>
<td>BSE</td>
<td>Bol'shaya sovetkaya entsiklopediya</td>
<td>Large Soviet Encyclopedia</td>
</tr>
<tr>
<td>Byull. gos. n.-i. khim. in-ta</td>
<td>Byulleten' gosudarstvennogo nauchno-issledovatelskogo khimicheskogo instituta vysokykh davleniy</td>
<td>Bulletin of the State High Pressures Chemical Research Institute</td>
</tr>
<tr>
<td>VINITOM</td>
<td>Vsesoyuznoye nauchnoye inzhenerno-teknicheskoе obshchestvo metallurgov</td>
<td>All-Union Scientific Society of Metallurgical Engineers and Technician</td>
</tr>
<tr>
<td>VINITI</td>
<td>Vsesoyuznyy institut nauchnoy i tekhnicheskoy информатики</td>
<td>All-Union Institute of Scientific and Technical Information</td>
</tr>
<tr>
<td>Zap. In-tu khimii</td>
<td>Zapiski Instituta khimii</td>
<td>Records of the Chemistry Institute</td>
</tr>
<tr>
<td>ITEIN AN SSSR</td>
<td>Institut tekhniko-ekonomicheskoy informatsii Akademii nauk SSSR</td>
<td>Institute of Technical and Economic Information of the USSR Academy of Sciences</td>
</tr>
<tr>
<td>Abbreviation</td>
<td>Complete Title</td>
<td>English Translation</td>
</tr>
<tr>
<td>------------------------------</td>
<td>-----------------------------------------------------</td>
<td>-------------------------------------------</td>
</tr>
<tr>
<td>Mosk. in-t stali</td>
<td>Moskovskiy institut stali</td>
<td>Moscow Steel Institute</td>
</tr>
<tr>
<td>Mos. ped. in-t im. Lenina</td>
<td>Moskovskiy pedagogicheskiy institut im. V. I. Lenin</td>
<td>Moscow Teacher Training Institute imeni V. I. Lenin</td>
</tr>
<tr>
<td>Nauch-tekhn. sb.</td>
<td>Nauchno-tekhnichestvenny sbornik po gazovoy tekhnike</td>
<td>Scientific-Technical Anthology on Gas Equipment</td>
</tr>
<tr>
<td>Nauch. zap. Kiyev'sk un-t</td>
<td>Kiyevskogo universiteta</td>
<td>Scientific Notes of Kiev University</td>
</tr>
<tr>
<td>Nauch. zap. In-ta mas. avtomatiki AN Ukr. SSR</td>
<td>Institut masinovedenija i avtomatiki Akademii nauk Ukr. SSR</td>
<td>Scientific Notes of the Institute of Machine Science and Automation of the Ukrainian SSR Academy of Sciences</td>
</tr>
<tr>
<td>Nauch. zap. Ukr. poligr. in-t</td>
<td>Ukrainskogo poligraficheskogo instituta</td>
<td>Scientific Notes of the Ukrainian Printing Institute</td>
</tr>
<tr>
<td>Nauch. zap. Khar'kovsk. in-ta sov. torgolvi</td>
<td>Khar'kovskogo instituta sovetskoy torgovli</td>
<td>Scientific Notes of the Kharkov Institute of Soviet Trade</td>
</tr>
<tr>
<td>Nauch. tr. Mosk. poligr. in-t</td>
<td>Moskovskogo poligraficheskogo instituta</td>
<td>Scientific Proceedings of the Moscow Printing Institute</td>
</tr>
<tr>
<td>Nauch. tr. Novocherk. politekh. in-t</td>
<td>Novocherkaskogo politeknicheskogo instituta</td>
<td>Scientific Proceedings of the Novocherkassk Polytechnical Institute</td>
</tr>
<tr>
<td>Nauch. tr. Khar'kovsk. gorn. in-t</td>
<td>Khar'kovskogo gornogo instituta</td>
<td>Scientific Proceedings of the Kharkov Mining Institute</td>
</tr>
</tbody>
</table>

- 16 -
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Complete Title</th>
<th>English Translation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sb. Kom-ta po korrozii i zashchite metallov Vsesoyuzn. soveta nauch.-tekhn. o-v</td>
<td>Sbornik Komiteta po korrozii i zashchite metallov Vsesoyuznogo soveta nauchno-teknicheskikh obshchestv</td>
<td>Anthology of Committee on Corrosion and Protection of Metals of the All-Union Council of Scientific-Technical Societies</td>
</tr>
<tr>
<td>Sb. Mosk. in-ta stali</td>
<td>Sbornik Moskovskogo instituta stali imeni I. V. Stalina</td>
<td>Anthology of the Moscow Steel Institute imeni V. I. Stalin</td>
</tr>
<tr>
<td>Sb. nauch. rabot komsomol'tsev AN SSSR</td>
<td>Sbornik nauchnykh rabot komsomol'tsev Akademii nauk SSSR</td>
<td>Anthology of Scientific Works of Komsomol Member of USSR Academy of Sciences</td>
</tr>
<tr>
<td>Sb. statey Gos. in-ta prikl. khimii</td>
<td>Sbornik statey k 20-letiyu Gosudarstvennogo instituta prikladnoy khimii</td>
<td>Anthology of Articles for the 20th Anniversary of the State Institute of Applied Chemistry</td>
</tr>
<tr>
<td>Soveshch. po vop. korrozii i bor'by s ney</td>
<td>Soveshchaniye po voprosam korrozii i bor'by s ney</td>
<td>Conference on Questions of Corrosion and Means of Combatting It</td>
</tr>
<tr>
<td>Soobshch. Vsesoyuz. in-ta metallov</td>
<td>Soobshcheniya Vsesoyuznogo instituta metallov</td>
<td>Communications of the All-Union Institute of Metals</td>
</tr>
<tr>
<td>Soobshch. Giprokoksa</td>
<td>Soobshcheniya Gosudarstvennogo instituta po proektirovaniyu predpriyatiy koksokhimicheskoy promyshlennosti</td>
<td>Communications of the State Institute for the Planning of Industrial By-Product Coke Enterprises</td>
</tr>
<tr>
<td>Soobshch. Dal'nevost. fil. AN SSSR</td>
<td>Soobshcheniya Dal'nevostochnogo filiala Akademii nauk SSSR</td>
<td>Communications of the Far Eastern Branch of the USSR Academy of Sciences</td>
</tr>
<tr>
<td>Abbreviation</td>
<td>Complete Title</td>
<td>English Translation</td>
</tr>
<tr>
<td>--------------</td>
<td>----------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>Soobshch. Leningr. instituta metallov</td>
<td>Soobshcheniya Leningradskogo instituta metallov</td>
<td>Communications of the Leningrad Institute of Metals</td>
</tr>
<tr>
<td>Soobshch. Tsentr. instituta metallov</td>
<td>Soobshcheniya Tsentral'nogo instituta metallov</td>
<td>Communications of the Central Institute of Metals</td>
</tr>
<tr>
<td>Tekhnich. entsiklopediya</td>
<td>Tekhnicheskaya entsiklopediya</td>
<td>Technical Encyclopedia</td>
</tr>
<tr>
<td>Tr. AN Lit. SSR</td>
<td>Trudy Akademii nauk Litovskoy SSR</td>
<td>Proceedings of the Lithuanian SSR Academy of Sciences</td>
</tr>
<tr>
<td>Tr. Azerb. industriya instituta metallov</td>
<td>Trudy Azerbaydzhanskoj industrial'noj instituta</td>
<td>Proceedings of the Azerbaydzhanskiy Industrial Institute</td>
</tr>
<tr>
<td>Tr. Voronezhsk. un-ta</td>
<td>Trudy Voronezhskogo universiteta</td>
<td>Proceedings of Voronezh University</td>
</tr>
<tr>
<td>Tr. Vsesoyuzn. alyumin.-magniyevogo in-ta</td>
<td>Trudy Vsesoyuznogo alyuminiiyevo-magniyevogo instituta</td>
<td>Proceedings of the All-Union Aluminum and Magnesium Institute</td>
</tr>
<tr>
<td>Tr. VIAM</td>
<td>Trudy Vsesoyuznogo instituta aviasionnykh materialov</td>
<td>Proceedings of the All-Union Institute of Aviation Materials</td>
</tr>
<tr>
<td>Tr. Vsesoyuzn. in-ta sodovoy prom-sti</td>
<td>Trudy Vsesoyuznogo instituta sodovoy promyshlennosti</td>
<td>Proceedings of the All-Union Institute of the Soda Industry</td>
</tr>
<tr>
<td>Tr. Vsesoyuzn. n.-i. instituta metrologii</td>
<td>Trudy Vsesoyuznogo nauchno-issledovatel'skogo instituta metrologii</td>
<td>Proceedings of the All-Union Scientific Research Institute of Weights and Measures</td>
</tr>
<tr>
<td>Abbreviation</td>
<td>Complete Title</td>
<td>English Translation</td>
</tr>
<tr>
<td>--------------------------------------------------</td>
<td>-------------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Tr. Vsesoyuzn. n.-i. in-ta po pererabotke nefti i gaza i polucheniyu iskusstv. zhidko-go topliva</td>
<td>Trudy Vsesoyuznogo nauchno-issledovatel'no gor'kovskogo instituta</td>
<td>Proceedings of All-Union Scientific Research Institute for Refining Processing of Oil and Gas and Extraction of Synthetic Liquid Fuels</td>
</tr>
<tr>
<td>Tr. Vsesoyuzn. n.-i. in-ta prirodnykh gazov</td>
<td>Trudy Vsesoyuznogo nauchno-issledovatel'no gor'kovskogo instituta prirodnykh gazov</td>
<td>Proceedings of All-Union Scientific Research Institute of Natural Gases</td>
</tr>
<tr>
<td>Tr. Vsesoyuzn. soveshch. po radiats. khimii</td>
<td>Trudy Vsesoyuznogo soveshchaniya po radiatsionnoy khimii</td>
<td>Proceedings of the All-Union Conference on Radiational Chemistry</td>
</tr>
<tr>
<td>Tr. Gor'kovsk. politekhn. in-ta</td>
<td>Trudy Gor'kovskogo politekhnicheskogo instituta</td>
<td>Proceedings of the Gorky Polytechnical Institute</td>
</tr>
<tr>
<td>Tr. Gruz. politekhn. in-ta</td>
<td>Trudy Gruzinskogo politekhnicheskogo instituta</td>
<td>Proceedings of the Georgian Polytechnical Institute</td>
</tr>
<tr>
<td>Tr. Dnepropetr. in-ta zh.-d. transp.</td>
<td>Trudy Dnepropetrovskogo instituta inzhenerov zheleznodorozhnogo transporta</td>
<td>Proceedings of the Dnepropetrovsk Institute of Rail Transport Engineers</td>
</tr>
<tr>
<td>Tr. Dnepropetr. khim.-tekhnol. in-ta</td>
<td>Trudy Dnepropetrovskogo khimiko-tekhnologicheskogo instituta</td>
<td>Proceedings of the Dnepropetrovsk Chemical Engineering Institute</td>
</tr>
<tr>
<td>Tr. Ivanovsk. khim.-tekhnol. in-ta</td>
<td>Trudy Ivanovskogo khimiko-tekhnologicheskogo instituta</td>
<td>Proceedings of the Ivanovo Chemical Engineering Institute</td>
</tr>
<tr>
<td>Tr. In-ta zh.-d. transporta</td>
<td>Trudy Instituta zheleznodorozhnogo transporta</td>
<td>Proceedings of the Institute of Rail Transport</td>
</tr>
<tr>
<td>Abbreviation</td>
<td>Complete Title</td>
<td>English Translation</td>
</tr>
<tr>
<td>------------------------------------</td>
<td>-------------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Tr. In-ta kristallogr. AN SSSR</td>
<td>Trudy Instituta kristallografiya Akademii nauk SSSR</td>
<td>Proceedings of the Crystallography Institute of the USSR Academy of Sciences</td>
</tr>
<tr>
<td>Tr. In-ta metallov</td>
<td>Trudy Instituta metallov</td>
<td>Proceedings of the Institute of Metals</td>
</tr>
<tr>
<td>Tr. In-ta metallurgii AN SSSR im.</td>
<td>Trudy Instituta metallurgii Akademii nauk SSSR imeni Baykova</td>
<td>Proceedings of the Institute of the Belorussian SSR Academy of Sciences</td>
</tr>
<tr>
<td>Tr. In-ta nefti AN SSSR</td>
<td>Trudy Instituta nefti Akademii nauk SSSR</td>
<td>Proceedings of the Petroleum Institute of the USSR Academy of Sciences</td>
</tr>
<tr>
<td>Tr. In-ta prikl. Mineralogii</td>
<td>Trudy Instituta prikladnoy mineralogii</td>
<td>Proceedings of the Institute of Applied Mineralogy</td>
</tr>
<tr>
<td>Tr. In-ta torfa AN Bel. SSR</td>
<td>Trudy Instituta torfa Akademii nauk Bel. SSR</td>
<td>Proceedings of the Peat Institute of Belorussian SSR Academy of Sciences</td>
</tr>
<tr>
<td>Tr. In-ta fiziki i matematiki AN</td>
<td>Trudy Instituta fiziki i matematiki Akad. nauk Azerb. SSR, Seriya fizicheskaya</td>
<td>Proceedings of the Institute of Physics and Mathematics of the Azerbaydzhan SSR Academy of Sciences, Physics Series</td>
</tr>
<tr>
<td>Azerb. SSR, ser. fiz.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tr. In-ta fiz. khimii AN SSSR</td>
<td>Trudy Instituta fizicheskoy khimii Akad. nauk SSSR</td>
<td>Proceedings of the Institute of Physical Chemistry of the USSR Academy of Sciences</td>
</tr>
<tr>
<td>Tr. Kazansk. aviats. in-ta</td>
<td>Trudy Kazanskogo aviatcionnogo instituta</td>
<td>Proceedings of the Kazan' Aviation Institute</td>
</tr>
<tr>
<td>Tr. Kazansk. khim.-tekhnol. in-ta</td>
<td>Trudy Kazanskogo khimiko-tekhnologicheskogo Instituta</td>
<td>Proceedings of the Kazan' Chemical Engineering Institute</td>
</tr>
<tr>
<td>Abbreviation</td>
<td>Complete Title</td>
<td>English Translation</td>
</tr>
<tr>
<td>--------------------------------------</td>
<td>-----------------------------------------------------</td>
<td>----------------------------------------------------------</td>
</tr>
<tr>
<td>Tr. Kazakh. gornometallurg. in-ta</td>
<td>Trudy Kazakhstanskogo gornometallurgicheskogo insti-</td>
<td>Proceedings of the Kazakh Mining and Metallurgy Institute</td>
</tr>
<tr>
<td></td>
<td>tuta</td>
<td></td>
</tr>
<tr>
<td>Tr. Komissii po bor'be s korrozioni metallov AN SSSR</td>
<td>Trudy Komissii po bor'be's korrozii metallov AN SSSR</td>
<td>Proceedings of the USSR Academy of Sciences Commission on Anti-Metal Corrosion Measures</td>
</tr>
<tr>
<td>Tr. konfer. po korrozii metallov AN SSSR</td>
<td>Trudy konferentsii po korrozii metallov AN SSSR</td>
<td>Proceedings of Conference of USSR Academy of Sciences on Corrosion of Metals</td>
</tr>
<tr>
<td>Tr. Leningr. in-ta aviat. priborostr.-</td>
<td>Trudy Leningradskogo aviat. priborostr.-</td>
<td>Proceedings of Leningrad Aircraft Instrument Making Institute</td>
</tr>
<tr>
<td></td>
<td>korostriyana</td>
<td></td>
</tr>
<tr>
<td>Tr. Leningr. kor. str. in-ta</td>
<td>Trudy Leningradskogo kor. str. korostriyana</td>
<td>Proceedings of the Leningrad Ship Building Institute</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tr. Leningr. khim.-tekhnol. in-ta</td>
<td>Trudy Leningradskogo khim.-tekhnol. in-ta</td>
<td>Proceedings of the Leningrad Chemical Engineering Institute</td>
</tr>
<tr>
<td>Tr. Leningr. elektrotekn. in-ta</td>
<td>Trudy Leningradskogo elektrotekn. in-ta</td>
<td>Proceedings of Leningrad Electrical Engineering Institute of Signalization and Communication Engineers</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tr. Mosk. aviat. in-ta</td>
<td>Trudy Moskovskogo aviat. in-ta</td>
<td>Proceedings of the Moscow Aviation Institute</td>
</tr>
<tr>
<td>Abbreviation</td>
<td>Complete Title</td>
<td>English Translation</td>
</tr>
<tr>
<td>-----------------------</td>
<td>---------------------------------------------------------------------</td>
<td>--------------------------------------------</td>
</tr>
<tr>
<td>Tr. Mosk. in-ta khim. maschinostrojeniya</td>
<td>Trudy Moskovskogo instituta khimicheskogo maschinostrojeniya</td>
<td>Proceedings of the Moscow Institute of Chemical Machine Construction</td>
</tr>
<tr>
<td>Tr. N.-i. in-ta osnovnoy khimii</td>
<td>Trudy Nauchno-issledovatel'skogo instituta osnovnoy khimii</td>
<td>Proceedings of the Research Institute of Basic Chemistry</td>
</tr>
<tr>
<td>Tr. N.-i. in-ta sintetich. spritov i organicheskikh produktov</td>
<td>Trudy Nauchno-issledovatel'skogo instituta sinteticheskikh spritov i organicheskikh produktov</td>
<td>Proceedings of the Institute of Synthetic Spirits and Organic Products</td>
</tr>
<tr>
<td>Tr. N.-i. i proekt. in-ta azotnoy prom-sti (GIAP)</td>
<td>Trudy Nauchno-issledovatel'skogo i proektnogo instituta azotnoy promyshlennosti</td>
<td>Proceedings of the Design and Planning Research Institute of the Nitrogen Industry</td>
</tr>
<tr>
<td>Tr. Novosib. s.-x. in-ta</td>
<td>Trudy Novosibirskogo sel'skoho khozyaystvennogo instituta</td>
<td>Proceedings of the Novosibirsk Agricultural Institute</td>
</tr>
<tr>
<td>Tr. Novocher. politekn. in-ta</td>
<td>Trudy Novocherkasskogo politekhnicheskogo instituta</td>
<td>Proceedings of the Novocherkassk Polytechnical Institute</td>
</tr>
<tr>
<td>Tr. Odessk. industr. in-ta</td>
<td>Trudy Odesskogo industrial'nogo instituta</td>
<td>Proceedings of the Odessa Industrial Institute</td>
</tr>
<tr>
<td>Tr. Sib. fiz.-tekhn. in-ta</td>
<td>Trudy Sibirs Skogo fiziko-tekhnicheskogo instituta</td>
<td>Proceedings of the Siberian Physico-technical Institute</td>
</tr>
<tr>
<td>Abbreviation</td>
<td>Complete Title</td>
<td>English Translation</td>
</tr>
<tr>
<td>------------------------------------------------</td>
<td>-------------------------------------------------------------------------------</td>
<td>------------------------------------------</td>
</tr>
<tr>
<td>Tr. Soveshch. po voprosam korrozii i bor'by s ney</td>
<td>Trudy Soveshchaniya po voprosam korrozii i bor'by s ney</td>
<td>Proceedings of Conference on Questions of Corrosion and How To Combat It</td>
</tr>
<tr>
<td>Tr. Ukr. n.-i. in-ta metallov</td>
<td>Trudy Ukrainskogo naucho-issledovatel'skogo instituta metallov</td>
<td>Proceedings of the Ukrainian Research Institute of Metals</td>
</tr>
<tr>
<td>Tr. Ural. politekh. in-ta</td>
<td>Trudy Ural'skogo politekhnicheskogo instituta</td>
<td>Proceedings of the Ural Polytechnical Institute</td>
</tr>
<tr>
<td>Tr. Khar'kovsk. n.-i. uglekhim. in-ta</td>
<td>Trudy Khar'kovskogo naucho-issledovatel'skogo uglekhimicheskogo instituta</td>
<td>Proceedings of the Khark Research Institute of Chemistry</td>
</tr>
<tr>
<td>Tr. Khar'kovsk. politekh. in-ta</td>
<td>Trudy Khar'kovskogo politekhnicheskogo instituta</td>
<td>Proceedings of the Khark Polytechnical Institute</td>
</tr>
<tr>
<td>Tr. TsAGI</td>
<td>Trudy Tsentral'nogo aviatsionnogo gidrodinamicheskogo instituta im. N. Ye. Zhukovskiy</td>
<td>Proceedings of the Central Aviation Institute of Hydrodynamics imeni Zhukovskogo</td>
</tr>
<tr>
<td>Uch. zap. Belorusk. un-ta</td>
<td>Uchennyye zapiski Belorusskogo universiteta</td>
<td>Scientific Notes of the Belorussian University</td>
</tr>
<tr>
<td>Tr. Tsentr. n.-i. in-ta morskogo flota</td>
<td>Trudy Tsentral'nogo naucho-issledovatel'skogo instituta morskogo flota</td>
<td>Proceedings of the Central Research Institute of the Maritime Fleet</td>
</tr>
<tr>
<td>Uch. zap. Kazansk. un-ta</td>
<td>Unperxyye zapiski Kazanskogo universiteta</td>
<td>Scientific Notes of the Kazan' University</td>
</tr>
<tr>
<td>Abbreviations</td>
<td>Complete Title</td>
<td>English Translation</td>
</tr>
<tr>
<td>------------------------</td>
<td>-----------------------------------------------------</td>
<td>-------------------------------------------</td>
</tr>
<tr>
<td>Uch. zap. Leningr. un-ta</td>
<td>Uchenyye zapiski Leningradskogo universiteta</td>
<td>Scientific Notes of the Leningrad University</td>
</tr>
<tr>
<td>Uch. zap. L'viv's'k u-tu</td>
<td>Uchenyye zapiski L'vovskogo universiteta</td>
<td>Scientific Notes of the L'vov University</td>
</tr>
<tr>
<td>Uch. zap. MGU</td>
<td>Uchenyye zapiski Moskovskogo gosudarstvennogo universiteta</td>
<td>Scientific Notes of the Moscow State University</td>
</tr>
<tr>
<td>Uch. zap. Rost. n/D gos. un-ta</td>
<td>Uchenyye zapiski Rostov n/D gosudarstvennogo universiteta</td>
<td>Scientific Notes of the Rostov-on-the-Don State University</td>
</tr>
<tr>
<td>Uch. zap. Chelyab. pedagogich. in-ta</td>
<td>Uchenyye zapiski Chelyabinskogo pedagogicheskogo instituta</td>
<td>Scientific Notes of the Chelyabinsk Teacher Training Institute</td>
</tr>
<tr>
<td>TS NIITMASH</td>
<td>Tsentral'nyy mauchno-issledovatelskiy institut tekhnologii mashinostrojeniya</td>
<td>Central Research Institute of Machine Technology</td>
</tr>
</tbody>
</table>
**LIST OF CONVENTIONAL ABBREVIATIONS**

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>AN SSSR</td>
<td>Akademiya nauk SSSR</td>
</tr>
<tr>
<td>AN Azerb. SSR</td>
<td>Akademiya nauk Azerbaydzhan SSR</td>
</tr>
<tr>
<td>AN Gruz. SSR</td>
<td>Akademiya nauk Gruzinskoy SSR</td>
</tr>
<tr>
<td>AN Kazakh. SSR</td>
<td>Akademiya nauk Kazakhskoy SSR</td>
</tr>
<tr>
<td>AN Latv. SSR</td>
<td>Akademiya nauk Latviyskoy SSR</td>
</tr>
<tr>
<td>AN Lit. SSR</td>
<td>Akademiya nauk Litovskoy SSR</td>
</tr>
<tr>
<td>AN Ukr. SSR</td>
<td>Akademiya nauk Ukrainskoy SSR</td>
</tr>
<tr>
<td>Bibliogr.</td>
<td>Bibliografija</td>
</tr>
<tr>
<td>Byull.</td>
<td>Byulleten</td>
</tr>
<tr>
<td>Vyp.</td>
<td>Vypusk</td>
</tr>
<tr>
<td>Vyssh.</td>
<td>Vysshaya</td>
</tr>
<tr>
<td>Gos.</td>
<td>Gosudarstvenny</td>
</tr>
<tr>
<td>Diss.</td>
<td>Dissertatsiya</td>
</tr>
<tr>
<td>Zh.</td>
<td>Zhurnal</td>
</tr>
<tr>
<td>Zavodsk.</td>
<td>Zavodskaya</td>
</tr>
</tbody>
</table>

- 25 -
Конференция
Промышленность
Совещание

Ким. Конференция. Проведена конференция по вопросам химической промышленности и совещания на тему "Инду строительство".
INTRODUCTION

The corrosion of construction materials or, in other words, their spontaneous destruction under the action of the surrounding environment is causing immense damage to our national economy.

Hundreds of millions of roubles are being spent on combating corrosion; it is therefore understandable that the Soviet government should devote such attention to this question. Recent years have seen the issuance of a number of resolutions providing for effective measures at improving the combating of corrosion of metals.

The present state of the science of corrosion and protection of metals in the USSR is extremely good, as is underscored in the foreign press in 1959 by such scientists as Brenner (USA), Cotton and Potter (England) and others. This fine showing is the result of persistent work of Russian and Soviet scientists over a period of more than 200 years.

The first detailed study of the dissolution of metals in acids (nitric and hydrochloric) was carried out by M. V. Lomonosov in 1744; using the microscope, he determined the amount of gas given off (Dissertatsiya o deystviy khimicheskikh rastvoriteley voobshche /Dissertation on the Action of Chemical Solvents in General/ published in the New Commentaries of the Academy of Sciences, 1747, Vol I, pages 245-266). Lomonosov showed that the mechanism of dissolution of metals is basically different from that of the dissolution of salts, in that in the dissolution of metals heat is given off whereas in the dissolution of salts heat is consumed. He also brought to light the cessation of the dissolution of iron wire in "strong spirit of saltpeter" (nitric acid), i.e. in other words he discovered the phenomenon of the passivity of metal.

A great contribution to the study of the phenomena of dissolution and passivity of metals was made by Academician V. V. Petrov (Izvestiya o gal'vani-vol'tovskih onytyakh/News of the Galvani-Volta Experiments/ St. Petersburg, 1803). He was the first to explain the process of passivization by the formation of a layer of oxide on the surface of the metal and proposed that the metal be etched on its surface with diluted sulphuric acid in order to activize it.
Academician A. I. Sherer expounded in great detail in 1808 the principles of the theory of corrosion, noting for the first time the role of temperature and contact of two metals (Rukovodstvo k prepodavaniyu khimii /Guide for the Teaching of Chemistry/, Section 148, St. Petersburg, 1808). And Prof. F. I. Gize (Chemistry, Kharkov University) propounded the theory of the dissolution of metals by the action of microelectrochemical elements (Vseobshchaya khimiya dlya uchaschikh i uchaschikh/General Chemistry for Students and Teachers/, Sections 99-100, Kharkov, Vol I, 1813).

A number of significant practical works on the combatting of corrosion were executed at the beginning of the 19th century, when the problem arose of eliminating the destruction of the copper plating of ships' hulls. The iron nails fastening the copper plates were subject to intensive corrosion. As early as 1820, S. P. Vlasov succeeded in perfecting a method for obtaining on the surface of the iron nails of a protective oxide film. The use of nails so treated considerably decreased the rate of corrosion of the copper plating (cf. V. Lyubarsky's article in Sorevnovatel' prosveshcheniya/The Educationalist, 1821, Part 16, pages 236-237).

Of great practical importance were the works of Academician B. S. Yakobi at electrochemical protection of steel in seawater; these projects were executed at the commission of the Maritime Scientific Committee in the period from 1854 to 1858. The researches resulted in the use of a zinc protector to shield the steel hulls of mines from corrosion.

Interesting researches on acid corrosion of metals were performed in 1881 by N. Kayander (Zhurnal russkogo fiziko-khimicheskogo obshchestva, chast' khimicheskaya /Journal of the Russian Physicochemical Society, Chemical Part/, 1881, Vol 13, pages 231, 246, 257), who drew attention to the fact that the speed of corrosion was a function of the electrical conductivity of the solution. N. P. Sluginov was the first to undertake a quantitative calculation of the activity of the microgalvanic elements (Teoriya elektroliza/Theory of Electrolysis, St. Petersburg, 1881).

Systematic researches on the processes of passivization of metals were begun in 1907 and pursued in the sequel by V. A. Kistyakovskiy (Journal of the Russian Physicochemical Society, Chemical Part, 1907, Vol 39, Section 1, Issue 8, 1445-1446, 1453-1454, 1454-1455; 1908, Vol 40, Section 1, Issue 8, 1782-1784; 1909, Vol 41, Section 1, Issue 4, 527; Elektrokhimiya/Electro-

Comparative atmospheric tests on iron roofing of various types were carried out at the beginning of the 20th century by A. I. Onufrovich (Zhurnal Russkogo metallurgicheskogo obshchestva /Journal of the Russian Metallurgical Society/, 1910, No 5, 203), while Ye. Kuklin made a study of the processes of etching of steel (Journal of the Russian Metallurgical Society, 1910, No 5, page 238).

A number of interesting researches on the theory of corrosion were carried out in the prerevolutionary years by Corresponding Member of the USSR Academy of Sciences N. A. Izgaryshev (Issledovaniya v oblasti elektrodynych protsessov /Researches in the Field of Electrode Processes/, Moscow, 1914; Elektrokhimicheskaya teoriya razrusheniya metallov /Electrochemical Theory of Corrosion of Metals/, Moscow, 1916).

Especially fruitful and numerous researches on corrosion and protection of metals have been carried out since the Great October Revolution. In the period from 1925 to 1940 there developed three main trends in the treatment of processes of metal corrosion. The first, which we have chosen to call the colloid-electrochemical, is represented by the works of Academician V. A. Kistyakovskiy (1865-1952) and his colleagues. On the basis of a study of the electrochemical behavior of metallic electrodes, he formulated a theory of corrosion of metals which included the notions of the thin oxide film on the surface of the metal, as a highly dispersed, colloidal, amorphous system, and of the existence of intermediary states of the metal surface distinct from both the active and the passive ones. The transit of the metal from a passive state into an active one begins with the formation of corrossions in the film, its crystallization caused by the action of molecular forces. Corrosion, according to Kistyakovskiy, occurs as a result of local galvanic currents between the component parts of the amorphous film and other impurities on the surface of the metal and the metal itself. Oxygen and carbonic acid serve as depolarizers for the local currents.

The development and substantiation of the heterogeneous-electrochemical trend in the science of corrosion of metals and research on structural corrosion have been carried out by G. V. Akimov (1901-1953) and his pupils. According to Akimov, a corroding metal represents a complex system of many electrodes.
The theory of multielectrode electrochemical systems developed by Akimov and N. D. Tomashov formed the basis for a successful explanation of the cause of intercrystal corrosion, the mechanism of the appearance of nonreversible potentials, the phenomena of the differential and the shielding effects, as well as several other instances of corrosion of metallic installations which were of practical importance. The school of corrosion experts founded by Akimov is the biggest in the USSR and it has received worldwide recognition. Individual chapters of his book Teorija i metody issledovaniya korrozii metallov (Theory and Methods of Research on Corrosion of Metals), published in Russian by the USSR Academy of Sciences in 1945 were brought out in English translation in 1955 in the journal Corrosion, organ of the National Association of Corrosion Engineers of the USA.

The trend developed by Academician A. N. Prumkin, Ya. M. Kolotyrkin, A. I. Shultin, Ya. V. Dardin and their colleagues in a number of works is called the homogeneous-electrochemical trend, because it is based on the assertion of the possibility of the occurrence of processes of electrochemical corrosion without any spatial differentiation of the surface of the metal into anode and cathode sectors. At the same time, in the event of a lesion of the homogeneous nature of the surface causing, as a rule an acceleration of the corrosion process, it is assumed that at the cathode connection the cathode reaction predominates while the conjugate anode reaction is slower; and, conversely, at the anode connection the process of anode oxidation is more intensive and simultaneously the conjugate cathode process of regeneration. If the area of connections is small, the entire surface of the metal can be considered to be equipotential, as has been shown by special calculations of V. G. Levich and A. I. Frumkin (ZH. fiz. khimii, 1941, Vol 15, No 6, page 789). In this case the speed of corrosion can be calculated, the influence of external conditions analyzed and the effectiveness of corrosion inhibitors determined, using the kinetic laws of electrode processes.

A substantial contribution to the development of the science of corrosion and protection of metals has been made by the associates of the USSR Academy of Sciences.

In the post-war years, N. D. Tomashov has discovered the phenomena of the reduction of the speed of corrosion of metals in process of passivization upon the insertion of cathode boosters I. L. Rozenfel'd has studied the mechanism of the action of corrosion inhibitors and the electrochemical processes in the thin films of electrolytes; A. I. Golubev has studied the real micro-
elements and estimated the action of corrosive galvanic elements; P. D. Dankov, N. A. Shishakov, D. V. Ignatov and V. V. Andreyeva have carried out crystallochemical researches of the processes of metal oxidation; A. T. Vagramyan and K. M. Gorbunov have studied the laws governing electocrystallization of metals and alloys; N. S. Gorbunov has researched the processes of formation of thermodiffusing coatings and I. V. Krotov has researched the processes of formation of phosphate coatings.

A number of interesting researches on corrosion and protection of metals have been carried out in the industrial research institutes and in the universities. Mention must here be made in the first place of the work done by S. A. Dalezkin, S. D. Beskov, I. N. Putilova and V. F. Barannik on corrosion inhibitors; by S. G. Vedenkin on corrosion and protection of metals on rail transport; by L. I. Antropov on corrosion inhibitors and the role of the zero point of metals; by A. V. Ryabchenkov on corrosion of metals under conditions of stress; V. P. Batrakov on corrosion in strongly oxidizing environments; by A. I. Krasil'shchikov on the mechanism of oxygen depolarization; by I. Ya. Klinov on non-metallic chemical materials; and by N. T. Kudryavtsev and V. I. Layner on galvanostegia.

In recent years large-scale work on corrosion and protection — works which are important practically — have been carried out in the Union Republics. In Latvia, Active Member of the Latvian SSR Academy of Sciences L. K. Lepin and her associates are researching colloid-chemical phenomena of dissolution of metals; in Lithuania, Active Member of the Lithuanian SSR Academy of Sciences Yu. Yu. Matulis is heading researches on the electocrystallization of metals; in the Ukraine, projects are in progress under the direction of Corresponding Member of the Ukrainian SSR Academy of Sciences I. N. Frantsevich on cathode protection of underground pipe-lines and at finding protective alloys; Corresponding Member of the Azerbaydzhan SSR Academy of Sciences V. F. Negreyev is directing projects at protection of maritime underwater petroleum bases and high-level viaducts; in Georgia, Active Member of the Georgian SSR Academy of Sciences R. I. Agladze is doing work on electocrystallization and corrosion of manganese.

Great attention is devoted in the USSR to the publication of reference works. Mention must here be made of such basic reference works as V. P. Batrakov's Korroziya konstruktsionnykh materialov v agressivnykh sredakh (Corrosion of Construction Materials in Aggressive Media); the N.I. Ryabtsev-edited Zashchita podzemnykh metallicheskikh sooruzheniy ot korrozii (Protection of
The brief survey of the history and present state of the science of corrosion and protection of metals makes clear the necessity of keeping the personnel of the research institutes and of industry well-informed on all published works in this field. Yet hitherto this so necessary bibliography of our own national literature on corrosion and protection has not been compiled. It is worthy of note that the foreign press has more than once published bibliographies of works on corrosion. In the USA, for example, a bibliography on questions of corrosion is regularly published by the National Association of Anti-Corrosion Engineers. In England the Metals Institute publishes a bibliography of works on corrosion.

In view of the fact that no special journal on corrosion and protection of metals is published in the USSR (whereas such journals are published in USA, England, France, West Germany and Czechoslovakia), the compilation of a bibliography of articles published in more than 200 journals and magazines presented certain difficulties.

The publication of this bibliography of our national scientific-technical works on corrosion and protection of materials will contribute to the incorporation of these published works into the practice of the USSR national economy.

V. V. Krasnoyarskiy
PART I, SECTION 4W

ROLE OF PROTECTIVE FILMS
IN THE CORROSION PROCESS OF METALS


PART I, SECTION 7
SOIL CORROSION


1055. V. V. Butov, "Corrosion of Metals By Scattered Particles of Solid Substances as Adsorbents of Gases and Water


1063. I. M. Yershov, "Electrocorrosion of Cable Casings (Communications Cables) by Vagabond Earth Currents," in the book: Bor'ba s korroziей – bor'ba za metall (The Fight Against Corros-
ion Is the Fight for Metal), Moscow, 1935, pages 237-243.


1066. A. N. Kaminskiy and M. G. Fel'dman, "Combating the Influence on Electrical Attraction on Communications Lines and the Corrosion of Cables on Northern Railways," Signalizatsiya i svyaz' na zh.-d. transp., 1935, Nos 4-5, pages 7-10.


1071. V. V. Krasnoyarskiy, "Field Method of Determining Corrosion Activity of Ground Soils," in the book: Teoriya i praktika protivokorrozionnoi zashchity podzemnykh sobrashcheniy (Trudy 6-go Vsesoyuznogo soveshchaniya po korrozii i zashchite metallov) (Theory and Practice of Anti-Corrosion Protection of Underground Structures (Proceedings of 6th All-Union Conference


1073. I. V. Krotov, Podzemnaya korroziya metallov i mery bor'by s ney (Underground Corrosion of Metals and Means of Combating It), All-Union Chemical Society imeni D. I. Mendeleev Moscow, 1939, 28 pages with graphs (University of Physicochemist and Chemistry Engineering imeni N. D. Zelinskiy).


1081. A. K. Miskarli, Opredeleniya korrosionnoy aktivnosti


1089. N. Ye. Fleshkov, "Vagabond Earth Currents of
Trolley and Power Installations and Corrosion of Lead Casings
of Underground Communications Cables," Tekhnika svyazi, 1930,
Nos 7-8, pages 7-10.

1090. V. A. Pritula, "Protracted Corrosion of Thick-Walled
Pipe-Lines," in the book: Teplofrog... (See 1071 above), pages
252-259. Bibliography of 3 titles.

1091. V. A. Pritula, "Survey of Works on Corrosion of
Main Oil Pipe-Lines in 1933-4," Neft. kh-vo, 1934, Vol 26, No 12,
pages 64-65.

1092. V. A. Pritula, Opredeleniy korroziynosti pochly
(Determination of Corrosiveness of Soils), United Scientific and
Technical Publishing Houses, Moscow-Grozny-Leningrad-Novosibirsk
1934, 79 pages with illustrations.

1093. V. A. Pritula, "Determination of Corrosiveness of
Soils by the Shlyumberger Method," Korroziya i bor'ba s ney, 1943
Vol 7, No 1, pages 12-17. Bibliography of 7 titles.

1094. V. A. Pritula, "Formula of Speed of Local Corrosion,
Korroziya i bor'ba s ney, 1939, No 3-4, pages 18-26.

1095. L. D. Razumov, "Estimate of Danger of Electrocorra-
sion of Underground Metallic Structures," Elektrichesstvo, 1956,
No 9, pages 67-73.

1096. M. M. Salam-Zade, "Methodology of Electrical Researc-
ho the Corrosion State of Underground Metallic Structures,"

1097. A. V. Solov'yev, "Influence of Moisture on Corrosion
Activity of Soils," Dokl. AN SSSR, 1940, Vol 27, No 2, pages

1098. A. V. Solov'yev, "Investigation of Corrosion of

1099. A. V. Solov'yev, "Examination of Corrosion of
Galvanized Iron Roofing Upon Contact with Moist Construction
Materials, Soil, Clay and Sand," ZH. prikl. khim., 1949, Vol 22,
Issue 1, pages 62-66.

1100. A. V. Solov'yev, "Acid Formation in Corrosion of Met-
in: Certain Ground Soils," ZH. khim. prom-sti, 1940, No 9, pages


1116. (which however is an obvious misprint for 1116.7)

PART I, SECTION 9
CORROSION IN AGGRESSIVE MEDIA


Rostov-on-the-Don, 1936, pages 57-65.


1306. D. Ya. Kogan, "Corrosion of Welded Metals in Solut-


1316. V. I. Kisel'nikov and V. P. Uspenskiy, "Corrosion and Electrochemical Behavior of Stainless Steels in Aggressive


PART II, SECTION 2

CORROSION INHIBITORS (RETARDERS)


2578. S. A. Balezin, "Inhibitors of Acid Corrosion,"


2583. S. A. Balezin, *Korroziya metalloy i bor'ba s ney (zamedliteli kislotnoy korrozii) (Corrosion of Metals and Ways of Combatting It (Retarders of Acid Corrosion)), Znaniye ("Knowledge" Publishing House), Moscow, 1953, 32 pages with illustrations.


2586. S. A. Balezin, V. P. Barannik and I. N. Putilova, *Primenenie ingibitoryov kislotnoy korrozii*, - 55 -
(Use of Inhibitors of Acid Corrosion), Goskhimizdat (State Publishing House of Chemical Literature), Moscow, 1948, 30 pages.


2597. S. A. Gintsberg, Ispol'zovaniye letuchikh zamedeliteley dlya bor'by s korroziiy metallov (Use of Volatile Inhibitors to Combat Corrosion of Metals), AN SSSR, filial VNITI, to pic 13, No M-59-26/4. Bibliography of 20 titles.


2600. O. I. Golyanitskiy, "Influence of Concentrations of Volatile Inhibitors Insufficient for Complete Protection on Rate of Atmospheric Corrosion of Steel 20,"


2609. N. D. Zavorokhin, Atsetilen i ego proizvodnye' lak inhibitory kislotnoy korrozii metallov (Acetylene and Its Derivatives as Inhibitors of Acid Corrosion of Metals), Avtoref... (as above 2601). In-t khimii AN Kazakh. SSR., Alma-Ata, 1958, 15 pages with graphs.

2610. Inhibitory korrozii (Corrosion Inhibitors), Scientific Editors, Dr. of Chemical Sciences Prof. S. A. Balezin and Candidate of Chemical Sciences Instructor N. G. Klyuchnikov, Profizdat (Trade Unions' Publishing House), Moscow, 1937, 151 pages with illustr. Bibliography at end of articles.


2632. Metody issledovaniya inhibitorov korrozii metallov (Methods of Investigation of Metals Corrosion...
Inhibitors (Anthology under editorial direction of Dr. of Chemical Sciences Prof. S. A. Balezin, Candidate of Chemical Sciences V. E. Ratinov), Profizdat. (Trade Unions' Publishing House), Moscow, 1958, 136 pages with illustr. Bibliography at end of articles.


2645. I. N. Putilova, S. A. Balezin and V. P. Barannik, Inhibitory korrozii metallov (Metals Corrosion Inhibitors), Goskhimizdat (State Publishing House of Chemical Literature), Moscow, 1958, 184 pages with illustr. Bibliography at end of chapters.


2649. I. N. Putilova and L. G. Gindin, "On the


2653. I. L. Rozenfel'd, "Corrosion Retarders in Neutral Media," AN SSSR Publication (as Zamedliteli korrozii v neutral'nykh sredakh), Moscow, 1953, 246 pages with illustr. Bibliography of 143 titles, pages 240-244.


2658. I. L. Rozenfel'd and G. V. Akimov, "Mechanism


2660. I. N. Rudberg, and P. I. Rashkovich, "Practical Use of Inhibited Paper (to Protect Needles from Corrosion," Anthology....(as above 2622), No 1, pages 131-134.


2664. I. S. Soloveychik, Praktika primeneniya prigradok pri khimicheskom ocherdechenych metallov (Practice of Use of Additives in Chemical Treatment of Ferrous Metals), KOIZ (United Cooperative Publishing House), Leningrad-Moscow, 1935, 184 pages with illustr.


- 65 -


2673. G. A. Shutova, Primenenye letuchikh inhibitorov korrozii metallov dlya konservatsii krupnogabaritnykh izdel'nykh (Use of Volatile Inhibitors of Corrosion of Metals for Conservation of Large-Dimensioned Items), Leningrad, 1958, 42 pages.

PART II, SECTION 7

PRESERVATIVE COATINGS AND LUBRICANTS


2898. Vremennyy rukovodchih material po za-shchitnym pokrytivam, konservatsii, upakovke i vyboru materialov dlya izdeliy, prednazyanchuykh k ekspluatatsii v usloviyah tropicheskogo klimata (Provisional Instructions on Protective Coatings, Conservation, Packing and Selection of Materials for Products Destined for Use in a Tropical Climate), TsBTI (Central Office of Economic Information), Moscow, 1957, 75 pages with Bibliography on page 75.


2903. P. I. Kazhdan, Zashchitnyye smazki (Protective Lubricants), Moscow, 1949, 43 pages with illustr.


2906. V. V. Karetnikov, "Emulsive Anti-Corrosion Lubricants for Spindles," Tekstil'n. vestn., 1939, No 6-7 (11-12), pages 45-46.

2907. T. A. Komarov, Konservatsiya mashin metodom naspyleniya smazyvayushchikhkhveshchestv (Preservation of Machines by Method of Dusting with Lubricating Substances), TsDTI (Central Office of Economic Information), Moscow, 1938, 7 pages with drawings.


2915. V. O. Milyavskaya, Zashchita ot korrozii izdeliy iz chernogo metal'a pri dlitel'nom khranenii i transportirovke (Protection From Corrosion of Wares Made out of Pig-Iron in Cases of Protracted Storage and Transport), TsDTI (Central Office of Economic Information), Moscow, 1955, 28 pages with illustr.


2919. Novye tekhnologicheskiye protsessy metallo-
poliytiy, okraski i konservatsii detalей (New Techno-
logical Processes of Metal Coating, Dyeing and Preservation
of Parts," Otd. tekhn. propagandy (Department of Techno-
logical Propaganda), Moscow, 1956, 66 pages with illustr.
one table.

2920. "On the Use of Dyes and Preservative Lub-
ricants (Protection of Artillery Fro m Corrosion),"
Tekhnika i vooruzeniye, 1936, No 4, pages 47-52.

2921. Ye. V. Pustovolov, "On Protection of Metals
from Corrosion During Storage. Report at Soviet-German
Conference on Varnish and Dye-Print Coatings," Russko-
serv. vestn. nauki i tekhniki, 1934, No 11, pages 49-53.

2922. K. S. Ramayya and R. Kh. Sills, "Method of
Determining Potential Corrosive Aggressiveness of Oil,"
Anthology of All-Union Council of Scientific-Technical
Societies (Sh. Vsesoyuzn. soveta nauch.-tekhn. o-v), 1959,
No 7, pages 81-89.

2923. K. S. Ramayya, R. Kh. Sills and R. D. Ben-
Yakir, Metod opredeleniya potentsial'noy korrozionnosti
masel (Method of Determining Potential Corrosiveness of
Oils), Mashriz (State Scientific and Technical Publishing
House of Literature on Machine Building), Moscow, 1956,
61 pages with illustr.

2924. K. S. Ramayya, "Method of Investigation of
Actual Corrosive Aggressiveness of Oils," Anthology...
(See above under 2922), 1958, No 6, pages 74-81.

2925. P. I. Sanin, L. F. Chernyavskaya and I. F.
Foyt, "On a Method of Determining Corrosiveness of
Lubricant Oils," Zavodsk. laboratoriya, 1957, Vol 23, No 6,
pages 696-697.

2926. V. V. Skorchelletti and V. Ye. Piskorskiy,
"Investigation of Certain Liquid Lubricants To Protect
Steel Wares from Corrosion in the Process of Production
and Storage," Zh. prikl. khimii, 1954, Vol 27, Issue 3,

2927. V. V. Sokolovskaya, Protivokorrozionnyye
poliytiya reshushchego instrumenta dlya dlitel'noy khran-
eniya i transportirovki (Anti-Corrosion Coatings of
Cutting Tools For Protracted Storage and Transportation),
TsETI (Central Office of Economic Information), Moscow,
1954, 36 pages.


PART II, SECTION 9 a.

NON-METALLIC COATINGS

GENERAL QUESTIONS


3862. V. L. Vinarskiy, "Experience at Use and Repair of Anti-Corrosive Sheaths in Sulphate Sections,"


3872. G. N. Duderov, V. I. Ryzhikov, "On the Use of


Bibliography of 62 titles.


3892 [Is missing in original?]


3897. On Incorporation of Several Organic Materials into Anti-Corrosion Engineering, Moscow, 1954, 22 sheets with illustrations.

3898. Organic Protective Coatings, translation from the English, edited by Ye. S. Gurevich, Mashgiz (State Publishing House on Machine Building), Moscow-Leningrad, 1959,
352 pages with illustr. Bibliography on pages 337-347.


3905. G. V. Sagalsrev, Antergmit i ego primenen- iye (Antiglue and Its Use), Goskhimizdat (See 3904), 1959, 88 pages with illustr. Bibliography of 12 titles.

3906. Sbornik instruktseii po primeneniyu nemetallichesheskiy stovkiy materialov dlya a nkorr- ozziomoy zashchity apparatury (Collection of Directon on Use of Non-Metallic Chemically Resistant Materials for Anti-Corrosion Protection of Apparatus), Moscow, 1941, 100 pages.

3907. A. Skobelev, "Crystallite, a Protective-


3911. G. V. Filaretov, Primenenie kristallitya dlya otdelki metallicheskikh predmetov narodnogo potreb.-leniya (Use of Crystallite to Finish Metal Consumer Goods), Moscow, 1956, 11 pages.

3912. I. Finarevskiy, Nekotorye sovremennye vidy zashchitno-dekorativnykh pokrytii otdelok detalej iz chernyh i tevtnykh metallov (Some Modern Types of Protective-Decorative Coatings and Finishes for Parts Made of Ferrous and Non-Ferrous Metals), Moscow, KOIZ (United Cooperative Publishing House), 1956, 20 pages.


PART II, SECTION 9 e

ASPHALT COATINGS

4315. G. Abragam, "Asfaltty i drugie bitumy" (Asphalts and Other Tars), ONTI (United Scientific and Technical Publishing House), Moscow, 1934.

4316. Ye. A. Andreyeva, V. I. Zhukov, V. I. Dul'cev and D. P. Valuyskaya, "Bitumnye pokrytia v usloviyakh katodnov zashchity (Asphalt Coatings in the Context of Cathode Protection)," ONTI (See 4315), Moscow, 1957, 15 pages.


4326. V. Ye. Volodin, "On the Question of the Use of Asphalt Insulations (for Etching Baths)," Korroziya i bor'ba s ney, 1938, Vol 4, No 2, pages 147-150.


4330. V. I. Zhukov, A. A. Kozlovskaya, I. A. Shokhin and Ya. M. Kaplunov, Brizol -- novyy bitumno-rezinovyy gidroizolotsionnyy material dlya zashchity magistral'nykh truboprovodov ot korrozii (Brizol, a New Asphalt-Rubber Waterproofing Material for Protection of
Main Pipe-Lines from Corrosion), ONTI (United Scientific
and Technical Publishing Houses), Moscow, 1959, 35 pages
with illustr.

4331. V. I. Zhukov and A. A. Kozlovskaya, "In-
fluence of Fillers on Properties of Asphalt Anti-Corrosive
Coatings (for Oil Pipe-Lines)," Str-vo predpriyatiy neft,

4332. V. I. Zhukov and A. A. Kozlovskaya, Novye
materialy dlya antikorrozionnyh izolyatsii i truboprovodov
(New Materials for Anti-Corrosive Insulation of Pipe-
Lines), ONTI (United Scientific and Technical Publishing
Houses), Moscow, 1955, 17 pages with illustr.

4333. V. I. Zhukov and A. A. Kozlovskaya, "Improve-
ment of Asphalt Insulation Coatings (Protection of Steel
Pipe-Lines from Corrosion)," Tr. Vsesoyuz. n.-i. in-
ta po str-vu truboprovodov, Issue 8, 1956, pages 5-17.

4334. V. I. Zhukov and A. A. Kozlovskaya, "Elect-
rometrical Method of Determination of Protective Capacity
of Asphalt Insulating Coatings," Tr. Vsesoyuz. n.-i.

4335. A. V. Znamenskiy, "Protection of Iron from
Corrosion (Use of Painting with Solution of Asphalt and
Benzine)," Moakravolgoastrovy, 1935, No 2 (8), page 32.

4336. A. F. Klimkova, "On Refractory Asphalt Com-
posites," Korroziya i bor'ba s ney, 1940, Vol 6, No 3,

4337. L. S. Korzhuyev, Dispersnyye bitumy, ikh
primeneniye dlya gidroizolyatsii i antikorrozionnych
polity (Dispersive Asphalts and Their Use for Water-
Proofing and Anti-Corrosive Coatings), Gosgeolizdat (State
Publishing House for Geological Literature), Moscow, 1951,

4338. G. D. Kreytser, Asfal't i vego primeneniy-
y tekhnike (Asphalt and Its Use in Equipment and Techno-
logy), Khimteoretizdat (Publishing House for Theoretical
Chemical Literature), Moscow, 1935.

4339. V. A. Kuznetsov, Zashchita bitumnymi pokryt-
ivami korpusov metallicheskih sudov ot korrozii (Protect-
ion of Hulls of Metal Ships from Corrosion Using Asphalt Coatings," Rechisdat (Publishing House for Literature on River Transport), Moscow, 1950, 44 pages with illustr.


PART II, SECTION 11
PLASTICS IN ANTI-CORROSION TECHNOLOGY


4489. G. A. Balalayev, "Protection of Chemical Apparatus from Corrosion by Rubberizing," Korroziya i bor'ba s ney, 1940, Vol 6, No 4, pages 28-34.


4499. A. V. Dmitriyev, T. N. Nikolayeva, G. K. Ryseva and V. Kuryatnikova, Elektricheskiye metody kontrolya zashchitnykh pokritiy iz ftoroplasta (Electrical Methods of Checking for Quality Such Protective Coatings as are Made of Phtoroplast), Mos 1959, 12 pages with graphs (USSR Academy of Sciences, Branch of VINITI. Topic 19, No M-59-154/5).


4504. P. Zmiy, "Transport of Hydrochloric Acid in Rubberized Rail Tank-Cars," ZH. prikl. khimii, 1935 (No No given), page 245.


4513. A. S. Lekhterov, Trevleniye v vinylplastovych vannakh (Etching in Vinyl Plastic Baths), Moscow, 1956, 8 pages with Illustr.


4521.  Plastmassovye shtampy i pokrytiya (Plastic Stamps and Coatings) (translated from the English), TS NIITMASH, Moscow, 1959, 30 pages with illustr.

4522.  N. I. Postnikov, "Rubberizing of Baths," Kauchuk i rezina, 1940, No 2, page 60.


4526.  V. T. Renne and V. V. Pasynkov, "Instrument for Measuring Degree of Polymerization of Articles Made of Plastics,"


4529. I. A. Savchuk, "Anti-Corrosion Mixtures on a Base of High-Polymere Acetylene," Prom-st' organ. khimii, 1940, No 4-5, pages 262-263.


4533. T. L. Fabrikant and V. L. Volkman, Asbovinil i vego primenenie v khimicheskoy promyshlennosti (Asbovinyl and Its Use in the Chemical Industry), State Publishing House of Chemical Literature, Moscow, 1958, 79 pages with Bibliography on page 77.


4537. V. A. Shishkin, *Izdelovaniye protseesa naneseniya smolyanykh pokrytii metodom gorvychego napyleniya i svoystv poluchavemykh pokrytii* (Examination of the Process of Application of Tar Coatings by the Method of Hot Powder Deposition and a Consideration of the Properties of the Coatings So Obtained), Author’s Abstract of Dissertation in Competition for the Degree of Candidate of Chemical Sciences, Moscow, 1954, 12 pages (Moscow Aviation Engineering Institute).
PART III, SECTION 3

PROTECTION OF UNDERGROUND INSTALLATIONS FROM CORROSION AND STRAY CURRENTS

A) General Questions


4724. P. A. Azbukin, A. A. Bedritskiy and A. P. Pritula, Bor'ba s korroziyey podzemnykh sooruzheniy (Combattting Corrosion of Underground Installations), ONTI (Combined Scientific and Technical Publishing Houses), Moscow, 1935.


4738. Vremennaya instruktsiya po zashchite gorodskikh gazoprovodov ot elektrokhimicheskoy korrozii (Provisional Directions on Protection of Urban Gas Mains from...
4739. Vremennaya instruktsiya po proyektirovaniyu
zashchity mezhdugerodnykh kabelov ot korrozii (Provisional
Directions on Planning of Protection of Inter-Urban Cables
from Corrosion), Svya'z'izdat (Publishing House for Commu-
ications Literature), Moscow, 1954, 56 pages with illustr.
 Bibliography of 20 titles.

4740. Vremennyye tekhnicheskiye usloviya na za-
shchitu podzemnykh metallicheskhikh sooruzheniy v Moskve
(Provisional Technical and Engineering Conditions for
Protection from Corrosion of Underground Metallic Install-
ations in Moscow), Moscow, 1949.

4741. Vsesoyuznoye nauchno-tekhnicheskoye so-
vychetaniya po korrozii i zashchite metallov. Sektsiya
podzemoy korrozii. Tezisy dokladov i soobshcheniy (All-
Union Scientific-Technical Conference on Corrosion and
Protection of Metals. Section on Underground Corrosion.
Abstracts of Reports and Communications), Anthology 2,
Profizdat (Trade Unions Publishing House), Moscow, 1953,
50 pages.

4742. V. I. Glazkov and V. G. Kotik, "Protection
of Main Pipe-Lines from Corrosion Caused by Currents
from Direct Current Electric Communication Lines," Tr.
Vsesoyuz. n.-i. in-ta po vodoprovodov, Issue 8,

4743. A. I. Gordyukhin, "Experience of Protection
of Underground Gas Pipe-Lines in Moscow from Corrosion
Caused by Stray Currents," in the Book: TEOIRY (See
4732), pages 187-194.

4744. M. B. Gorelik, E. I. Ioffe and L. A. Suris,
Zashchita gazovykh setey ot bluhodyushchikh tokov (Pro-
tection of Gas Systems from Stray Currents), Izd. M-va
kommun. khoz-vy RSFSR (Publishing House of the RSFSR
Public Utilities Ministry), 1959, 144 pages with illustr.

4745. D. A. Gofen, "Chemical Protection of Under-
ground Reservoirs (Neutralizers, Mixers, and the Like),
Inform. byull. Tekhnika zashchity ot korrozii, 1957, No
3 (8), pages 12-14; 1958, No 1 (10), pages 7-9.


P. G. Doroshenko, V. I. Glazkov and V. G. Kotik, "Electrical Shielding of Main Pipe-Lines from Corrosion," in the book: Trudy Vsesoyuznogo soveshchaniya po bor'be s morskoy korroziiy metallov (Proceedings of All-Union


4757. I. M. Yershov, Zashchita podzemnykh kabeley ot elektrokorrozii (Protection of Underground Cables from Electrical Corrosion), Transzheldorizdat (Rail Transport Literature Publishing House), Moscow, 1953, 76 pages with illustr.

4758. I. M. Yershov, Zashchita podzemnykh sooruzhennyh ot korrozii vyzyvayemyh bluzhdayushchimi tokami (Protection of Underground Installations from Corrosion Caused by Stray Currents), Transzheldorizdat (Rail Transport Literature Publishing House), Moscow, 1948, 160 pages with illustr. (Trudy Vsesoyuznogo n.-i. in-ta zh.-d. transp., Issue 21). Bibliography on pages 157-159.

4759. I. M. Yershov, "On Measures for Combatting Electrical Corrosion and Corrosion Caused by the Heterogeneity of Soils," Trudy soveshchaniya po voprosam korrozii i bor'by s'ney, 1940, No 2, pages 153-162 (Moscow-Leningrad, AN SSSR).

4760. V. I. Zhukov, "Ways of Improving Insulating Coatings for Pipe-Lines," in the book: Teoriya... (See above 4732), pages 110-118.


4762. Zashchita podzemnykh metallicheskih truboprovodov i kabeley ot korrozii (Protection of Underground Metallic Pipe-Lines and Cables from Corrosion), under general editorial direction of Prof. V. N. Mil'shtein,

4764. Zashchita truboprovodov ot korrozii (Protection of Water Pipes from Corrosion), Issue 1, GOSINTI, Moscow, 1959.


4772. V. V. Krasnoyarskiy, Ye. A. Andreyeva and V. I. Bulayev, "Some Questions on Use of Plastics for Protection of Underground Pipe-Lines from Corrosion," in the book: Zashchita... (See above 4729), pages 37-40. Bibliography of 3 titles.

4773. K. N. Kupreyanov, "Use of Groundsoils Treated with Black Binding Substances for Protection of Reservoir Bottoms from Groundsoil Corrosion," Trudy Vsesoyuznogo n.-i. in-ta po str-vu truboprovodov, Issue 8, 1956, pages 81-86.


4786. M. I. Mikhaylov, V. N. Akulenok and A. F.
Marchenko, Zashchita mestdvorodnykh kabel'ev svyazi ot korrozii (Protection of Inter-Urban Communications Cables from Corrosion), Svyaz'izdat (Publishing House for Communications Literature), Moscow, 1953, 131 pages with illustr. Bibliography on pages 127-128.


4788. V. F. Negreyev, M. S. Trifel', S. A. Mekhmanarov and L. G. Khlanarova, "Increasing the Effectiveness of Anti-Corrosion Protection of Pipe-Lines (With Editor Note), Str-vy truboprovodov, 1950, No 7, pages 4-7.

4789. K. K. Nikolskiy and L. D. Razumov, Sovremennaya zashchita ot korrozii kabel'ev svyazi i podzemnykh metallicheskih sooruzheniy (Combined Protection from Corrosion of Communications Cables and Underground Metallic Installations), Svyaz'izdat (Publishing House for Communications Literature), Moscow, 1957, 38 pages with illustr.


4797. Pravila zashchity podzemnykh metallicheskikh sooruzheniy ot korrozii (Rules for Protecting Underground Metallic Installations from Corrosion), Gosstroyizdat (State Publishing House for Construction Literature), Moscow, 1959, 50 pages with diagrams.


4802. V. A. Pritula, "A New Insulation for Under-


4815. I. V. Strizhevskiy and D. K. Tomlyanovich, Blugdavnashcholsje toki i elektricheskiye metody zashchity ot korrozii (Teoriya i raschet) (Stray Currents and Electrical Methods of Protection and Shielding from Corrosion (Theory and Calculations)), Ministerstvo kommun. kh-vа (Public Utilities Ministry), Moscow, 1957, 202 pages with drawings. Bibliography on pages 199-200 (40 titles).


4818. I. V. Strizhevskiy, "Distribution of Potentials in the Rails-Earth-Underground Installations System in Drainage Shielding," in the Book: Teoriya... (See above 4732), pages 148-166.

4820. Teoriya... (See above 4732), Editor Prof. N. D. Tomashov, Dr. of Chemical Sciences, AN SSSR, Moscow, 1958, 274 pages with illustr. Bibliography at end of articles.


4824. V. S. Turkin, Novyje metody zashchity ot korrozii podzemnykh magistral'nykh truboprovodov. Sobesedneniya (Vsesoyuznoe soveshchaniye po stroitel'stvu) (New Methods of Protection of Underground Main Pipe-Lines from Corrosion. Communication (All-Union Conference on Construction)), Moscow, 1958, 18 pages with illustr.


4828. N. A. Tsekun, "Some Questions of Electrical Shielding and Protection of Underground Metallic Installations from Corrosion," in the book: Teoriya... (See above}


B) Cathode and Protector Shielding


4839. I. M. Yershov, Zashchita podzemnykh kabley ot elektrokorozi (Protection of Underground Cables from Electrical Corrosion), Transzheldorizdat (Rail Transport Publishing House), Moscow, 1953, 76 pages with illustr.

4840. Instruktsiya po ustroystvu i ekspluatatsii protektornykh ustanovok dlya zashchity podzemnykh truboprovodov ot korrozii (Directions on Installation and Operation of Protector Installations for Protection of Underground Pipe-Lines from Corrosion), TsNITESTRT, Moscow, 1956, 25 pages with illustr.


4842. O. S. Kal'man, Elektricheskaya zashchita podzemnykh metallicheskih sooruzheniy ot korrozii (Electrical Anti-Corrosion Shielding of Underground Metallic Installations), Narkomhoz (People's Commissariat of Communal Economy), Moscow, 1940.


4849. V. V. Krasnoyarskiy and A. F. Lunev, Primenenie protektorov dlya zashchity podzemnykh truboprovodov ot korrozii (Use of Protectors for Shielding Underground Pipe-Lines from Corrosion), Moscow 1957, 17 pages with 24 figures and Bibliography of 6 titles (AN SSS R, filial VINITI, Topic 13, No M-57-322/21).


4861. I. N. Frantsevich, Ye. V. Khrushchova and T. F. Frantsevich-Zabludovskaya, Katodnaya zashchita
magistral'nykh truboprovodov (Cathode Shielding of Main Pipe-Lines), AN Ukr. SSR, Kiev, 1949, 30 pages. Bibliography on pages 77-79.


PART III, SECTION 5

CORROSION AND PROTECTION IN THE OIL-REFINING INDUSTRY


4949. G. A. Balalayev, "Combating Corrosion of Apparatus in the Oil Processing Industry," Korroziya i bor'ba s ney, 1941,


4953. N. A. Butkov and N. I. Dubroshtan, "Corrosion and Combatting It in Processing of Petroleum with High Sulphur Content," Vest. neft', 1940, No 4, pages 35-44.


4962. N. A. Kazak and V. V. Kolganov, "Protection Against Thunderstorm Discharges, Static Discharges and Corrosion in Oil Refineries and Chemical Factories of the USA (from foreign literature)," Energ. byull., 1956, No 6, pages 26-28.


4977. V. F. Negreyev and I. A. Iskenderov, "Corrosion of Steel Structures in Maritime Oil Bases and Their Protection," in the book: Trudy... (see above 4946), pages 82-101.


4993. Z. L. Shenderov, *Korrosiya i korrozionnosteroykiye metally v naftenererabotke* (Corrosion and Corrosion-Resistant Metals in Oil Processing), Bashknigoizdat (Bashkir Amalgamated Publishing House), Ufa, 1959, 84 pages with illustr. Bibliography on pages 82-83.


PART IV

CORROSION OF NON-METALLIC MATERIALS

1. Corrosion of Concrete, Reinforced Concrete and Cement Coverings


5039. V. S. Artamonov, Zashchita ot korrozii zhelezobetonnykh opor kontaktnoy seti (Anti-Corrosion Protection of the Reinforced Concrete Supports of a Contact Network), Moscow, 1958, 19 pages with illustr.

5041. P. P. Budnikov, "Results of 17 Years of Investigation of Questions of Corrosion," in the book: Korroziya... (See above 5035), pages 5-9.


5051. M. Gulyamov, *Sul'fatostoykivye tsemenfly na baze portlandtsemente i obozghennykh melokoalinitovykh clin* (Sulphate-Resistant Cements on a Base of Portland Cement and Burned Clays of Small Kaolin Content) (Author's Abstract of Dissertation in Competition for Academic Degree of Candidate of Chemical Sciences, Institute of Chemistry, AN UzSSR, Tashkent, 1956.


5055. S. I. Idashkin, "Gas-Permeability of Concrete as a Factor Occasioning Corrosion of Concrete in Installations," in the book: *Trudy k...* (See above 5036), pages 301-314.


5058. Issledovaniya v oblasti zaschity betona i drugikh stroitel'nykh materialov ot korrozii (Investigations in the Area of Protection of Concrete and Other Building Materials from Corrosion) (Anthology of Articles under Editorial Direction of Prof. V. H. Moskvin, Dr. of Technical Sciences), Gosstroyizdat (State Publishing House for Construction Literature), Moscow, 1950, 147 pages with illustr.


5060. V. V. Kind, "Corrosion of Concrete in Hydraulic Engineering Installations," in the book: Trudy k... (See above 5035), pages 113-144.

5061. V. V. Kind, Korroziva metallov. Korroziva betona pod dejstviyem prirodnykh vod (Corrosion of Metals. Corrosion of Concrete Under the Action of Natural Waters), Moscow, 1953, 44 pages.

5062. V. V. Kind, "Some Questions and Problems in the Field of Corrosion of Hydraulic Engineering Concrete," in the book: Korroziva... (See above 5035), pages 35-43.


5065. S. N. Korotkov, "Physico-Chemical Processes Occurring Upon Freezing of Young Concrete," in the book: Issledovaniya... (See 5058 above), pages 119-133.

Bibliography of 19 titles.
5066. *Korroziya...* (See above 5035), editor P. P. Budnikov, Moscow 1954, 256 pages with illustr. Bibliography at end of reports.


5080. V. M. Moskvich, "Conditions of Formation and Subsistence of Calcium Sulphoaluminate," in the book: Trudy k... (See above 5036), pages 31-59.


5086. Yu. A. Nilender, "Surface Endurance of Concrete and Its Connection with the Appearance of Cracks," in the book: Trudy k... (See above 5036), pages 255-300.


5093. "Resolution of the Expanded Conference on Corrosion of Concrete," in the book: Trudy k... (See above 5036), pages 325-334.

5094. "Resolution of Conference on Corrosion of Concrete and Measures to Combat It," in the book: Korroziiya... (See above 5035), pages 251-255.


5104. B. G. Skramtayev, S. M. Royak and H. I. Gershman, "Corrosion of Cements In Constant and Alternating Circumstances of Aggression," in the book: Korroziya... (See above 5035), pages 120-149.


- 121 -


5116. B. D. Trinker and V. P. Plutenko, "Zashchita ot korrozii shchel'zobetonnykh ventilatsionnykh i dyumykh trub, rabotayushchikh v usloviyakh aggressivnykh gazov" (Anti-Corrosion Protection of Reinforced Concrete Ventilation and Smoke Flues Operating in a Context of Aggressive Gases), TSBTI (Central Office of Economic Information), Moscow, 1959, 40 pages with illustr.


2. Corrosion of Various Materials


- 126 -


5159. G. V. Sagalayev, Antegmit i yego primenenije (Antegmite and Its Use), Goskhimizdat (State Publishing House for Chemical Literature), Moscow, 1959, 80 pages.
with illustr. Bibliography of 12 titles.


