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LIST OF UNCLASSIFIED REPORTS RECEIVED IN THE UCRL INFORMATION
DIVISION DURING THE PERIOD OF SEPTEMBER 16-30, 1954

October 5, 1954

Printed for the U. S. Atomic Energy Commission

LIST OF CODES FOR REPORT NUMBERS

ACCO	-American Cyanamid Co.
AERE	-Atomic Energy Research Establishment, Harwell, England
AFCRC	-Air Force Cambridge Research Center
AMRL	-Army Medical Research Lab., Fort Knox
ANL	-Argonne National Lab.
ANP	-Aircraft Nuclear Propulsion Project, Oak Ridge
APEX	-General Electric Co., Aircraft Gas Turbine Div.
ASTIA	-Armed Services Technical Information Agency
BM	-Bureau of Mines
BM-II	-Northwest Electrodevelopment Lab., Bureau of Mines, Albany, Oregon
BMI	-Battelle Memorial Institute
BNL	-Brookhaven National Lab.
BRL	-Ballistic Research Labs., Aberdeen Proving Grounds
CEA	-Commissariat à l'Énergie Atomique, France
CEI, CRC, CRE, CRP, CRT and others	-Chalk River Project, Canada
CEPS	-Commonwealth Edison Co.
CERN	-European Council for Nuclear Research
CF	-Oak Ridge National Lab., Central Files
CU	-Columbia University
DC	-General Electric Co., ANP Project
DOW	-Dow Chemical Co.
DP	-E. I. du Pont de Nemours and Co.
FMPC	-National Lead Co. of Ohio
HW	-Hanford Works, Richland, Wash.
ISC	-Iowa State College
JENER	-Joint Establishment for Nuclear Energy Research, Norway
K	-Carbide and Carbon Chemicals Co., K-25 Plant
KAPL	-Knolls Atomic Power Lab.
KLX	-Vitro Corp. of America
LA, LADC, LAMS	-Los Alamos Scientific Lab.
LRL, LWS	-California Research and Development Co.
MIT	-Massachusetts Institute of Technology
MLM	-Mound Lab.
Monograph	-Bell Telephone System
MTA	-California Research and Development Co.
NAA	-North American Aviation, Inc.
NBS	-National Bureau of Standards
NM	-Naval Medical Research Institute
NRL	-Naval Research Lab.
ONRL	-Office of Naval Research, London
ORNL	-Carbide and Carbon Chemicals Co., Oak Ridge National Lab.
PR	-Chalk River Project, Canada

SEP	-Sylvania Electric Products, Inc.
TEI, TEM	-U. S. Dept. of Interior, Geological Survey
TID	-Technical Information Service, Oak Ridge
UCLA	-Univ. of California at Los Angeles
UR	-Univ. of Rochester
USNRDL	-U. S. Naval Radiological Defense Lab.
WAPD	-Westinghouse Electric Corp., Atomic Power Division
Y	-Carbide and Carbon Chemicals Co., Y-12 Plant

Many prefixes used for research and development reports cover a number of installations. NP("Non-Project") numbers are assigned by the Technical Information Service at Oak Ridge to those reports which it receives from sources not under contract to the Atomic Energy Commission. The UCRL Information Division gives "Misc" numbers to any others received here that do not bear an identifying number. Many reports are grouped together under numbers corresponding to an AEC division or operations office. Some of these are as follows:

CO, COO	-Chicago Operations Office
IDO	-Idaho Operations Office
NYO, NYOO	-New York Operations Office
ORO	-Oak Ridge Operations Office
RMO	-Raw Materials Division
WASH	-Atomic Energy Commission, Washington

In our semimonthly "List of Reports Received" the originating installation will be placed in the author column whenever the report code number does not indicate a specific laboratory, or is obsolete or not given in this list.

Two series of translations are currently received, one sponsored by the AEC (AEC-tr), the other by the National Science Foundation (NSF-tr).

LIST OF UNCLASSIFIED REPORTS RECEIVED IN THE UCRL INFORMATION
DIVISION DURING THE PERIOD OF SEPTEMBER 16-30, 1954

Radiation Laboratory, Department of Physics,
University of California, Berkeley, California

October 5, 1954

Index Number	Title	Author	Date
BIOSCIENCES			
*AECU-1753	Rate of Potassium Exchange of the Rat Erythrocyte	J. Weller I. Taylor Harvard Univ.	
*AECU-1765	Oxidation of Endogenous Fatty Acids of Rat Tissues, in Vitro	M. Volk R. Millington S. Weinhouse Lankenau Hosp. Res. Inst.	
*AECU-1821	Cellular Respiration, Cell Division, and Ionizing Radiations	E. Barron S. Seki Argonne Nat'l Lab.	10-51
*AECU-1968	Acetylation of Amino Acids by Enzymes of <u>Clostridium Kluveri</u>	J. Katz I. Lieberman H. Barker Univ. of Calif., Berkeley	
*AECU-1978	The Use of Cobalt 60 Applicators in the Treatment of Carcinoma of the Female Genital Tract	J. Morton A. Barnes, et al. Ohio State Univ.	
*AECU-2923	Experimental Administration of Ethylenediamine- tetraacetic Acid in Plutonium Poisoning	H. Foreman, Los Alamos P. Fuqua, W. Norwood, Hanford	1954
AERE-T/R-563	The Scattering of Neutrons by the Walls of a Laboratory	M. Biram J. Tait	8-50
*Microcard			

*BM-IC-7627	Control of Metallurgical and Mineral Dusts and Fumes in Los Angeles County, California	G. Allen F. Viets L. McCabe	4-52
*BM-RI-4218	Flocculation of Aerosols by Intense High-Frequency Sound	H. St. Clair M. Spendlove E. Potter	3-48
*BM-RI-4782	Investigation of a Photoelectric Device for the Determination of Low Concentrations of Dust	D. Stone L. Kane, et al.	3-51
HW-30781	Fiberglass Air Filters for Hot Laboratories	L. Kattner J. Gifford	6-18-54
HW-32086	Neutron Scattering from the Walls and Air of a Laboratory	D. Glasgow	6-9-54
HW-32292	An Application of Florescent Pigment to the Measurement of Particle Inhalation Probabilities	L. Schwendiman	7-1-54
NM-004-006.03.08	In Vivo Measurement of Body Fat and Body Water in a Group of Normal Men	E. Osserman G. Pitts, et al.	3-10-54
NM-005-048.01.08	Similarities Between Schizogony and Sporogony in Plasmodium	C. Huff	4-30-54
NM-007-081.16.01	The Composition of Skin as Compared with Muscle	M. Walser L. Bodenlos	4-22-54
NM-007-081.16.02	Transfers of Water and Electrolytes Between Skin and Extracellular Fluid Following Extensive Experimental Flash Burns	M. Walser L. Bodenlos	4-22-54
NM-Lecture-54-1	Glutathione in Radiation Injury Lecture and Review Series No. 54-1	E. Cronkite G. Brecher, et al.	1-3-54
*NP-5257	Changes in the Proteolytic and Antiproteolytic Activity of the Blood Serum in Man and Animals Following Exposure to X-Rays. (Project No. 21-3501-0004, Report No. 4)	K. Burdon R. Guthrie Sch. of Aviation Medicine	
*Microcard			

NRL-MEMO-309	Fuel Element Dosimetry by Absorption Changes in Silver Activated Phosphate Glass	H. Rabin	6-7-54
NYO-1590	Laboratory Performance of Fabric Dust and Fume Collectors	C. Billing M. First, et al., Harvard Univ.	8-31-54
NYO-1591	Air Cleaning Studies. Progress Report for July 1, 1952 to June 30, 1953.	M. First L. Silverman, et al., Harvard	8-5-54
UR-338	Studies of Flash Burns: the Influence of Skin Temperature in the Production of Cutaneous Burns in Swine	K. Berkley H. Pearse T. Davis	8-5-54
USNRDL-443	The Effect of Neutrons on Thymic and Circulating Lymphocytes in the Mouse	R. Carter E. Cronkite V. Bond	11-19-53
USNRDL-TR-3	Effects of X-Irradiation on Lipid Metabolism. II. Uptake of P ³² into Liver Phospholipids	E. Weinman S. Lerner C. Entenman	6-17-54
USNRDL-TR-6	Delayed Gastric Emptying in Rats After Whole- and Partial-Body X-Irradiation	M. Swift S. Taketa V. Bond	6-25-54

CHEMISTRY

*AD-18240	The Electrodeposition of Titanium from Aqueous Solutions. Final Technical Report.	T. Franklin F. Denise Virginia Inst. for Sci. Res.	8-31-53
*AECU-1980	Bromine Atom Catalyzed Rearrangements of the Three Isomeric Bromopropenes	E. Burrell (Thesis) Notre Dame	8-1-51
*AECU-2344	Note on Bomb Reduction of Chromium Trifluoride with Calcium	A. Beard Knolls	
*AECU-2732	Application of Radioactive Tracers to Distillation and Extraction Studies. Summary Report for the Period October 1, 1948 to January 31, 1951	J. Maloney H. Hughes, et al. Kansas Univ.	10-52
*Microcard			

AECU-2918	Studies on the Anodic Polarization of Zirconium-Growth Rates and Thicknesses of the Very Thin Anodic Oxide Films	G. Adams, Jr. M. Maraghini P. Van Rysselberghe Oregon Univ.	7-54
AERE-C/R-1411	The Determination of the Lead Content of Cocoa Using a Square-Wave Polarograph	D. Ferrett G. Milner A. Smales	5-26-54
AERE-C/R-1435	The Determination of Uranium and Thorium in Uranium/Thorium Alloys	E. Furby	5-54
ANL-5303	Thiocyanate Spectrophotometric Analysis of Titanium, Vanadium and Niobium	C. Croughamel C. Johnson B. Hjelte	8-54
*ATI-129118	Bibliography and Source Material on Nitric Acid with Emphasis on its Use as an Oxidizer for Rocket Fuels. Report No. 515-801	K. Elsas Bendix Aviation Corp.	12-31-51
*BM-RI-4741	Transmission Characteristics in the Visible Spectral Region of the Quinalizarin and Beryllium-Quinalizarin Complex in N/4 Sodium Hydroxide Solution	G. Marks H. Hall	10-50
*BM-RI-4756	Decomposition Temperatures of Polytetrafluoroethylene and Polymonochlorotrifluoroethylene as Indicated by Halogen Liberation	H. Watson, et al.	12-50
*BM-RI-4872	Method of Concentrating Kerogen in Colorado Oil Shale by Treatment with Acetic Acid and Gravity Separation	A. Hubbard, H. Smith, et al.	4-52
*BM-RI-4882	Volumetric Determination of Small Quantities of Uranium with Special Reference to Errors Associated with Use of Jones Reducter	C. Sill H. Peterson	6-52
COO-147	Investigation of Imperfections in Solids: Color Centers in Sodium Cyanide Crystals	G. Isetti T. Neubert Illinois Inst. of Tech.	7-17-54
*Microcard			

HW-31803 Rev.	Self-Diffusion of Uranyl Ion and the Uranium Tri-butyl Phosphate Complex	H. Hahn	7-20-54
*ISC-240	Investigation of the Oxidized Complexes of Nickel with Vic-Dioximes	C. Banks A. Carlson	7-23-52
ISC-437 Rev.	Caustic Treatment of Zircon Sand	G. Beyer D. Spink, et al.	8-17-54
ISC-495	The Vapor Pressure of Mercury at 250-360°C.	F. Spedding J. Dye	6-23-54
K-1166	Natural Abundance of the Bromine Isotopes	A. Cameron E. Lippert, Jr.	9-17-54
K-1168	The Natural Abundance of the Lithium Isotopes	A. Cameron	9-15-54
MISC-1954-86	Preparation of $K_3Co(CN)_5Br$ and $K_3Co(CN)_5I$ by an Atom Transfer Reaction	A. Adamson Univ. of South. Calif.	8-54
MISC-1954-87	A Variable Field Survey Beta-Ray Spectrometer	W. Meinke W. Cassatt K. Hall, Michigan Univ.	6-10-54
*NBS-3197	Electrodeposition of Titanium (Quarterly Progress Report for) January 1 - March 31, 1954	W. Reid J. Bish A. Brenner	4-1-54
NBS-3503	Technical Memorandum No. 27 on Research and Development Continuous Analysis of Ortho-Parahydrogen Mixtures	D. Weitzel L. White	8-23-54
NM-000-018.06.35	On the Theory of the Donnan Membrane Equilibrium	T. Hill	6-29-54
*NP-4177	Diffusion in Catalytic Heterogeneous Systems; Studies in Vapor Phase Esterification	N. Amundson M. Stusiak Univ. of Minnesota	11-3-52
NP-5289	Technical Report VI The Ion Exchange of Zirconium and Hafnium in Perchloric Acid with Amberlite IR-120	E. Larsen P. Wang Univ. of Wisconsin	8-5-54
*Microcard			

*NRL-Memo-177	The Optical Properties of a Quaterphenyl-Polystyrene Scintillator	C. Ravilious	6-30-53
*ORO-129	Spectrophotometric Quantitative Determination of the Platinum Metals. Final Report Covering the Period July 1, 1950 to June 30, 1954	G. Ayres Univ. of Texas	7-54
SO-3255	Decomposition of Carbon Dioxide by Ionizing Radiation. Semi-Annual Report	A. J. Hogan Rensselaer Polytechnic Inst.	4-1-54
SO-3256	The Diffusion-Distillation Process for the Separation of Isotopes. Semi-Annual Report	Rensselaer Polytechnic Institute	4-1-54
GEOSCIENCES			
*BM-RI-4796	Oil-Shale Operations in New South Wales, Australia	A. Kraemer H. Thorne	7-51
ENGINEERING			
*ANL-HE-93	Pressure Loss in Piping Systems; A Comparison of Conventional Factors for Fluid Friction in Piping Components	R. Armstrong	
METALLURGY AND CERAMICS			
*AECU-1761	Collector-Depressant Equilibria in Flotation; I. Inorganic Depressants for Metal Sulfides	G. Last M. Cook Univ. of Utah	10-1-51
*AECU-1993	Vanadium	A. Seybolt Knolls	
*AECU-2088	Fundamentals of Glass to Metal Bonding. II. Wettability of Some Group I and VIII Metals by Several Sodium Silicate Glasses; Second Technical Report	V. Zackay D. Mitchell, et al. Inst. of Eng. Res., Univ. of Calif.	4-15-52
*AECU-2330	Technical Progress Report (on) Creep of Alloys Research (for) July 1 to December 1, 1952	E. Parker T. Hazlett Inst. of Eng. Res., U.C.	12-1-52
*Microcard			

*AECU-2925	Fundamentals of Glass-to-Metal Bonding. IV. Wettability of Some Metals by Potassium Silicate and Sodium Borate Glasses.	J. Pask A. Kaminski D. Mitchell Inst. of Eng. Res., U. C.	6-21-54
AERE M/TN 25	An Estimation of Some Unknown Surface Tensions of Metals	J. Taylor	5-4-54
ANL-5094	Urania Bodies: Fired Density vs Particle Size	F. Gunzel, Jr. W. Lambertson	8-54
ANL-5268	Urania-Zirconium Cermets	W. Rauch	8-54
*ANL-JM-13	Methods of Bond Testing	J. Monaweck W. Marburger W. McGonnagle	4-53
*BM-RI-4835	Explosive Characteristics of Titanium, Zirconium, Thorium, Uranium and their Hydrides	I. Hartmann J. Jagy M. Jacobson	12-51
*BM-RI-4858	Electrical Conductivity and Density of Fused Binary Mixtures of Magnesium Chloride and Other Chlorides	R. Huber E. Potter H. St. Clair	3-52
BMI-938	The Effects of Chromium, Iron, and Nickel on the Mechanical Properties of Zirconium	W. Chubb G. Muehlenkamp	8-11-54
ISC-514	Improved Calcium Fluoride Shapes	D. Wilder E. Fitzsimmons	9-1-54
MISC-1954-47 No. 5	An Investigation of Scaling of Zirconium at Elevated Temperatures Quarterly Status Report No. 5 June 2 to September 2, 1954	W. Baldwin, Jr. D. Garibotti H. Green, Case Inst. of Tech.	
MISC-1954-80	An Investigation of Strain Aging in Fatigue	J. Levy G. Sinclair Illinois Univ.	8-54

*Microcard

MISC-1954-82	I. Deformation Studies of Metals at Elevated Temperatures II. The Iron-Chromium-Nickel Ternary System III. Effect of Structure and Composition on the Strength Properties of Stainless Steel; Periodic Status Report No. 8 June 1954 - August 1954	N. Grant H. Chang, et al. Mass. Inst. of Tech.
*MIT-1116	Ultrasonic Testing of the Bond in Clad Metal Tubes	W. Lees, Nuc. Metals, Inc. 8-2-54
*NACA-TN-3197	Mechanical Properties at Room Temperature of Four Cermets of Titanium Carbide with Nickel Binder	A. Johnson, Jr. 4-6-54
*NAVORD-1595	The Development of X-Ray Standards for Shielded Arc Welds in Aluminum	J. Hirschfield 11-21-50 D. O'Connor, et al.
NBS Circular 556	Thermal Conductivity of Metals and Alloys at Low Temperatures - A Review of the Literature	R. Powell 9-1-54 W. Blanpied
NYO-3699	Electrochemical Studies of Non-aqueous Melts Quarterly Progress Report for Period Ending July 1, 1954	R. Mehl 9-54 G. Derge Carnegie Inst. of Tech.
NYO-3965	The Study of Diffusionless Phase Changes in Solid Metals and Alloys Progress Report for Period December 1, 1953 to February 28, 1954	T. Read 7-14-54 D. Lieberman, et al. Columbia Univ. Sch. of Mines
NYO-6444	The Measurement of Thermal Conductivity of Refractory Materials	W. Kingery 6-30-54 F. Norton Mass. Inst. of Tech.
SEP-154	Grain Growth During Sintering	H. Hausner 7-1-54
SO-2516	Preferred Orientations in Beta-Annealed Zirconium Report No. RL-1148	J. Keeler 8-54 A. Geisler General Electric Res. Lab.
*WADC-TR-53-9	Refractory Materials for Use in High-Temperature Areas of Aircraft	N. Thielke 1-53
*WAL-401/68-42	Torsion Pre-Strain and the Fatigue Life of RC-55 Titanium Alloy. Interim Report	J. Kaufman 1954 E. D'Appolonia Carnegie Inst. of Tech.
*Microcard		

PHYSICS

*AECU-1783	Electronic Devices for Nuclear Physics; Quarterly Report; July 1951 - October 1951	G. Morton Radio Corp. of America	
*AECU-1969	General Purpose Floating Decimal Panels for the IBM Card-Programmed Electronic Calculator-Model II	S. Lida Los Alamos	
*AECU-1975	Activation Cross Sections Measured with Antimony-beryllium Photoneutrons	C. Kimball (Thesis) Argonne Nat'l Lab.	3-52
*AECU-1979	A New Sample Mounting Mechanism and Associated Equipment for Use with the 1.25 Mev Van de Graaff Generator	S. Black Argonne Nat'l Lab.	3-52
*AECU-2059	Radioactivity Produced in Platinum by Slow Neutron Capture	B. Haldar Notre Dame Univ.	
*AECU-2083	Preliminary Report on the Testing of RCA Improved Cathode Ray Tubes for Application in Williams Memory System	J. Chu R. Klein Argonne Nat'l Lab.	5-9-52
*AECU-2921	Investigations on Cs ¹³⁷	W. Kinney (Thesis) Rensselaer Polytechnic Inst.	9-53
AERE Inf/Bib 92	Homopolar Generators and Liquid Metal Brushes	M. Greenhill	1954
AERE M/R 1421	Radiation Induced Colour Centres in Vitreous Silica	M. Levy J. Varley	4-14-54
AERE-T/R-563	The Scattering of Neutrons by the Walls of a Laboratory	M. Biram J. Tait	8-50
ANL-5273	Physics Division Quarterly Report December, 1953, January and February 1954	L. Turner	8-54
*BRL-816	On the Study of Computational Errors	S. Gorn	5-52
*Microcard			

CERN-PS/JPB-7	Shaping of Magnet Poles for Generation of Uniform Gradients	J. Blewett	4-2-54
*CERN-PS/KJ-10	Momentum Compaction Relationship in the New Type Synchrotron with Straight Sections	K. Johnsen	10-9-52
*CERN-PS/KJ-11	Phase Oscillations	K. Johnsen	11-3-52
*CERN-PS/KJ-21	A Discussion of the Phase Equation in the Neighborhood of the Transition Energy	K. Johnsen	6-12-53
CERN-PS/RH-2	On the Validity of Perturbation Theory as a Help for Numerical Integration of Non-Linear Equations of Motion		8-54
*CERN-T/GL-4	Orbit Instabilities in the New Type Synchrotron (Linear Approximation)	G. Lüders	3-53
COO-171	Research in Nuclear Physics Progress Report 4	Purdue Res. Found.	6-15-54
HW-32086	Neutron Scattering from the Walls and Air of a Laboratory	D. Glasgow	6-9-54
ISC-508	Quarterly Summary Research Report in Physics for April, May, and June, 1954	Ames Lab. Staff	8-27-54
MISC-1954-18 No. 7	Development of a Mercury Jet Switch for UCRL, Monthly Progress Report No. 7	Detroit Controls Corp.	8-54
MISC-1954-83	Theory of Non-Newtonian Flow II Solution System of High Polymers Tech. Report No. XLIV, June 30, 1954	T. Ree H. Eyring Univ. of Utah	6-30-54
MIT QPR AC LAB 4-6/54	Quarterly Progress Report April - June 1954		
Monograph 2240	Electron Beam Focusing with Periodic Permanent Magnet Fields	J. Mendel C. Quate W. Yocom	5-54
*Microcard			

Monograph 2244	P-N-I-P and N-P-I-N Junction Transistor Triodes	J. Early	5-54
Monograph 2246	Lattice Theoretic Properties of Frontal Switching Functions	E. Gilbert	4-54
Monograph 2254	The Decilog: A Unit for Logarithmic Measurement	E. Green	7-54
Monograph 2279	Secondary Electron Emission from Germanium	J. Johnson K. McKay	2-15-54
Monograph 2280	Negative Resistance Arising from Transit Time in Semiconductor Diodes	W. Shockley	7-54
Monograph 2283	Electronic Relay Tester	T. Davia A. Blaha	7-54
Monograph 2284	Theoretical Fundamentals of Pulse Transmission	E. Sunde	5-54
Monograph 2285	Analysis of the Backward-Wave Traveling-Wave Tube	H. Heffner	7-54
Monograph 2292	Avalanche Breakdown in Silicon	K. McKay	3-54
Monograph 2301	Solution of the Field Problem of the Germanium Gyrator	R. Wick	6-54
NBS-3386	Technical Memorandum No. 26 on Research and Development Instrumentation for Measurement and Remote Indication of Absolute Vapor Pressure in Hydrogen Dewars	G. Curtis	6-21-54
NBS-3471	Factors Affecting the Precision and Accuracy of an Absolute Noise Thermometer	E. Hogue	7-54
N - NP -2563d	Techniques and Materials for use at Liquid Hydrogen Temperatures, Information Secured at Ohio State University March 7-9 1950	M. Benedict P. Graff Hydrocarbon Res, Inc.	4-11-50

*NP-5251	Investigation of Scintillation Counters for the Detection of Soft X-rays. Fourth Quarterly Progress Report (for) March 1, 1952 to June 1, 1952	A. Caswell J. Nelson Oregon Univ.	
*NP-5252	Investigation of Scintillation Counters for the Detection of Soft X-rays. Fifth Quarterly Progress Report (for) June 1, 1952 to September 30, 1952	A. Caswell M. Takeo Oregon Univ.	
*NP-5253	Investigation of Scintillation Counters for the Detection of Soft X-rays. Sixth Quarterly Progress Report (for) October 1, 1952 to December 31, 1952	A. Caswell Oregon Univ.	
*NP-5254	Investigation of Scintillation Counters for the Detection of Soft X-rays. Seventh Quarterly Progress Report (for) January 1, 1953 to March 31, 1953	J. Nelson M. Takeo Oregon Univ.	
*NP-5256	Investigation of Scintillation Counters for the Detection of Soft X-rays. Final Report (for) July 1, 1953 to October 1, 1953	J. Nelson R. Ellickson Oregon Univ.	
*NP-5260	Research on the Electronic Configuration in the Ferromagnetic Materials. Final Report.	E. Pugh Carnegie Inst. of Tech.	7-54
*NP-5278	A Slow Linear Magnetic Sweep Circuit	B. Ludovici Florida Univ.	6-54
*NP-5280	Scintillation Techniques Applied to Electron Energy Studies. Quarterly Progress Report No. 8 for January 1, 1954 to June 30, 1954	E. Schillinger, Jr. De Paul Univ.	
*NRL-4377	The TW-10: A High Writing Speed Cathode-Ray Tube with Distributed Deflection	R. Talbot L. Johnson	5-25-54
NRL-4394	A Standard Source of Radiation for Radiac Detectors	H. Childers A. Nash J. Graves	8-19-54
NRL-Memo-177	The Optical Properties of a Quaterphenyl-Polystyrene Scintillator	C. Ravilious	6-30-53
*Microcard			

NRL Translation No. 364	Transverse Convergence Created by the Slits of Ion Optical Instruments	F. Bertein	1951
ONRL-72-54	Technical Report: The Glasgow Conference on Nuclear Physics	J. Richardson	8-18-54
ONRL-76-54	Technical Report: Some Applications of Strong Focusing Fields at the Institute of Physics, Univ- ersity of Bonn		8-26-54
ONRL-79-54	Technical Report: Nuclear Physics in the Stockholm Area		
ORNL-1756	On Norms of Vectors and Matrices	A. Householder	9-14-54
ORNL-1758	Filament Life in Low Pressure Arc Type Ion Source	O. C. Yonts	9-13-54
ORNL-1767	A 2800°C Calutron Ion Source Unit and Its Use in Separating the Isotopes of Pd, Pt, Ru, and Ir	W. A. Bell, Jr. L. Love C. Normand	7-30-54

REACTOR SCIENCE

MISC-1954-88	Technical Memorandum: The Swedish Reactor Pro- gram with a Note on the Italian Program	Office of the Naval Attache, London	8-25-54
ORNL-1572	The HRE Simulator An Analog Computer for Solving the Kinetic Equations of a Homogeneous Reactor	D. Collier L. Meeks J. Palmer	9-24-54

MISCELLANEOUS

*AECU-1974	Progress Report for the Period March 1, 1951 - February 15, 1952	J. Jacobs Iowa State Univ.	
*BM-RI-4771	Synthetic Liquid Fuels; Annual Report of the Secre- tary of the Interior for 1950; Part II. Oil from Oil Shale	J. Boyd	2-51

*Microcard

BNL 299 (S-22)	Quarterly Progress Report April 1 - June 30, 1954 Unclassified Section		
MISC 1954-29 No. 65	Translated Contents Lists of Russian Periodicals No. 65 August 1954	Dept. of Scientific and Industrial Res. (Great Britain)	8-54
MISC-1954-30 No. 5	Nuclear Notes for Industry No. 5	TIS OR	
MISC-1954-79	Inventory of Electromagnetically-Enriched Isotopes	C. Keim Carbide and Carbon Chem. Corp.	
MISC-1954-84	Technical Report No. 9	H. Sponer Duke Univ.	7-1-54
MISC-1954-85	Technical Report No. 10	H. Sponer Duke Univ.	8-15-54
NACA-Abstract No. 70	Current NACA Reports	Nat'l Adv. Comm. for Aero.	9-21-54
NBS-3364	Technical Memorandum No. 25 on Research and Development a High-Vacuum Seal-off Valve	R. Richards	8-20-54
NM-000-018.07 Memo 54-5	Glass Apparatus Improvements	A. Mack	5-25-54
NM-000-018.07 Memo 54-6	High Noise Cable as a Sensing Device	H. Meryman H. Shirer S. Lovalenti	7-2-54
NP-5266	Quarterly Progress Report No. 12	Univ. of Chicago	7-15-54
NYO-4582	Annual Report on Research Project	G. Failla H. Rossi Columbia Univ.	4-1-54
UR-348	Quarterly Technical Report April 1 thru June 30, 1954		8-26-54

REPORTS ISSUED BY INFORMATION DIVISION, UCRL

UCRL-2561	Interphase Transformers for Parallel Inverters	L. Rovelsky (Thesis)	5-20-54
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UCRL-2655	Separation of Iron, Cobalt, Zinc, and Phosphorus on Synthetic Resin	H. Helwig J. Ashikawa E. Smith	7-19-54
UCRL-2661	Medical Health Physics Quarterly Report (April, May, June 1954)		7-29-54
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UCRL-2703	List of Unclassified Reports Received in the UCRL Information Division During the Period of September 1-15, 1954		9-16-54
UCRL-1427 Declassified	Attenuation and High Energy Neutron Production Measurements for 190 Mev Deuterons and 340 Mev Protons	W. Knox	8-29-51
UCRL-1450 Declassified	Mode Flattening in Long Cavities	R. Birge K. Ehlers J. Carothers	9-27-51