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**UNCLASSIFIED**

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**LIST OF UNCLASSIFIED REPORTS RECEIVED IN THE UCRL INFORMATION  
DIVISION DURING THE PERIOD OF SEPTEMBER 1-15, 1954**

September 16, 1954

Berkeley, California

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  
TID -U. S. Dept. of Interior, Geological Survey  
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 1-15, 1954

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

September 16, 1954

Index Number	Title	Author	Date
BIOSCIENCES			
*AECD-3528	Studies on Cell Division. 1. Alpha Radiation as a Division Inhibiting Agent	E. Spoerl R. Balske Mound Lab.	4/28/53
*AECU-1312	Fermentation of L-Arabinose-1-C <sup>14</sup> by Lactobacillus Pentoaceticus	Coll. of Agri. Univ. of Calif.	
*AECU-1322	Phosphomonoesterase Activity in Hepatic Tissues in the Mouse	K. Tsuboi Kansas Univ.	
*AECU-1437	Lymphoid Lesions in Poliomyelitis	S. Sommers J. Wilson F. Hartman Virus Lab., Henry Ford Hosp.	
*AECU-1443	Some Acute Cytologic Effects of Ionizing Radiation	S. Warren M. Holt S. Sommers Cancer Res. Inst., New Eng. Deaconess Hospital, Boston	
*AECU-1459	A Proposed Revision of the Structural Formulae of Vicine and Divicine	A. Bendich Sloan-Kettering Inst. for Cancer Research	
*AECU-1531	Intracellular Chloride in Man	N. Deane, M. Ziff, H. Smith N. Y. Univ., Coll. of Medicine	
*Microcard			

*AECU-1663	A Phase Contrast Microscopy Study of X-Ray Induced Pycnosis in the Living Cell	T. Tahmisian D. Adamson Argonne Nat'l Lab.	9/51
*AECU-1719	The Effect of Adrenocorticotropic Hormone upon the Fecal Lysozyme Titer in Ulcerative Colitis	R. Reifenstein S. Gray Med. Clinic, Peter Bent Brigham Hosp.	
*AECU-1732	The Redistribution of Radiocalcium and Radio-Iodine During Histamine Shock	M. Murray W. Collings L. Wolterink Mich. State College	
*AECU-1815	Electrophoretic Analysis of Serum and Urinary Proteins in Diabetic Glomerulosclerosis	H. Rifkin M. Petermann Montefiore Hosp., N. Y.	
*AECU-1816	The Treatment of Post-Irradiation Infection	C. Miller C. Hammond M. Tompkins Chicago Univ.	
*AECU-1823	The Mutagenic Action of Dilute Colloidal Polonium on Fungi	J. Rowell E. Stakman E. Butler Minnesota Univ.	
*AECU-1886	Water Exchanges and Barriers as Studied by the Use of Hydrogen Isotopes	E. Pinson Los Alamos Sci. Lab.	
*AECU-1921	Effects of a Folic Acid Antagonist on Nucleic Acid Metabolism	D. Goldthwait A. Bendich Sloan-Kettering Inst. for Cancer Research	
*AECU-1945	Inhibition of the Photochemical Activity of Isolated Chloroplasts. I. Univalent Ions	J. Spikes R. Lumry J. Rieske Inst. for the Study of Rate Processes, Univ. of Utah	1/15/52
*Microcard			



- \*AECU-2414                    Studies on Ca<sup>45</sup> Transport in Crayfish Nerve  
S. Soloway  
J. Welsh  
A. Solomon  
Biophys. Lab.,  
Harvard Med. School
- \*AECU-2417                    Effects of Hypophysectomy, Demedulation and  
Epinephrine Injection on the Ascorbic Acid Content  
and In Vitro Oxygen Consumption of Rats' Adrenals  
J. Wood, Jr.  
R. McKee  
Cancer Res. Inst.,  
New Eng. Deaconess  
Hosp., Boston
- \*AECU-2658                    Extrapolation Ionization Chamber for Measurement  
of Dosage in Intracavitary Irradiation  
A. Littman  
B. Fox, et al  
Illinois Univ.,  
Coll. of Medicine
- \*AECU-2706                    Further Studies on the Availability of Phosphorus  
in Alfalfa Hay  
G. Lofgreen,                    1953  
M. Kleiber, Univ. of Calif.
- \*AECU-2716                    Autoradiographic Arsenic Localization in Adult and  
Embryonic Epithelium and Connective Tissues  
S. Sommers                    1953  
B. Geyer  
R. Chute  
Lab. of Pathology,  
Harvard Cancer Comm.
- \*AECU-2736                    Studies of the Incorporation of Palmitate-1-C<sup>14</sup>  
into Tissue Lipides in vitro  
L. Jedeikin                    1953  
S. Weinhouse  
Lankenau Hosp. Res.  
Inst., Philadelphia
- \*AECU-2749                    Potassium Uptake by the Dog Erythrocyte  
H. Frazier                    1953  
A. Sicular  
A. Solomon  
Biophys. Lab.,  
Harvard Med. School

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*AECU-2824	Removal of Radioisotopes by Sewage Treatment Processes. Progress Report No.3 Covering Period June 1, 1953 to May 31, 1954. Biological Treatment of Radioactive Wastes	G. Klein A. Greenberg W. Kaufman Sanitary Engr. Res. Lab., Univ. of Calif., Berkeley	6/30/54
*AECU-2905	The Use of Gamma Rays as Therapeutic Agent in Carcinoma. Final Report	Washington Univ., Seattle Schl. of Medicine	1953
HW-30231	Relative Effectiveness of Various Agents for Preventing the Internal Deposition of Plutonium in the Rat	J. Katz M. Weeks W. Oakley	1/1/54
HW-32399	Influence of Plutonium Concentration on Effectiveness of Therapeutic Agents	M. Weeks W. Oakley R. Thompson	8/1/54
MISC-1954-68	Biological Treatment of Radioactive Wastes, Removal of Radioisotopes by Sewage Treatment Processes, Progress Report No. 3 Covering Period June 1, 1953 to May 31, 1954	G. Klein A. Greenberg W. Kaufman Sanitary Engr. Res. Lab., Univ. of Calif.	6/30/54
MLM-989	Biological Research Quarterly Progress Report Through June 17, 1954	D. Anthony	7/13/54
*NP-5261	Underwater Disposal of Molten Sodium	R. Andrews E. King Mine Safety Appl. Co.	7/30/54
*NYO-1591	Air Cleaning Studies. Progress Report for July 1, 1952 to June 30, 1953	M. First L. Silverman, et al Air Cleaning Lab., Harvard Univ. Schl. of Public Health	8/5/54

\*Microcard

*NYO-1592	Performance of the Model K Electro-Polar Filter	C. Billings R. Dennis L. Silverman Air Cleaning Lab., Harvard Univ. Schl. of Public Health	7/15/54
*NYO-4548	The Effects of X-Irradiation on Physical Exercise and Behavior in the Dog: Related Hematological and Pathological Control Studies	W. Jetter O. Lendsley F. Wholwill Boston Univ. Schl. of Med.	1953
NYO-4966	Clinical Clearance Rate Measurements for the Accumulation of I <sup>131</sup> by the Thyroid Gland Part I. Methods	W. MacIntyre J. Storaasli, et al Western Res. Univ.	8/27/54
NYO-4967	Comparison of the Protective Effects of D and L Isomers of Cysteine Against Total Body Radiation and Nitrogen Mustard Rats	J. Storassli S. Rosenberg A. Weisberger Western Res. Univ.	8/6/54
ONRL-63-54	Further Studies on the Syndrome of Radiation Sickness; Technical Report	J. Tullis	8/5/54
*ORO-127	Medical Division Quarterly Progress Report for January 1 to March 31, 1954. Teletherapy Design Problems III	Oak Ridge Inst. of Nuclear Studies	
*ORO-127 (Suppl.)	Medical Division Quarterly Progress Report for January 1 to March 31, 1954, Supplement. Teletherapy Design Problems III	M. Brucer J. Harmon E. Anderson Oak Ridge Inst. of Nuclear Studies	
UCLA-302	Glucose Transport Across the Wall of the Intestine of Irradiated and Non-Irradiated Rats	L. Detrick H. Upham, et al	9/3/54
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UCLA-303	A Study of the Pharmacological Effects of Tetrophan, (3,4-dihydro-1,2-benzacridine-5-carboxylic acid)	T. Haley W. McCormic	9/8/54
UR-347	Nickel Carbonyl, Review of Literature	F. Haven	7/14/54
UR-352	Studies on the Acute Effects of X-Irradiation and $P^{32}$ on 21 and 32 Day Old Rats	M. Skiov T. Noonan	8/4/54
USNRDL-TR-2	Effects of X-Irradiation on Lipid Metabolism. I. Plasma Phospholipid Levels in Several Species	C. Entenman R. Neve, et al	7/11/54
CHEMISTRY			
*AD-24369	Exchange and Aquation Studies with Thiocyanato Complexes	A. Adamson R. Wilkins Chem. Labs., Univ. of So. Cal.	1953
*AECD-3636	Oriented Dioxide Films on Uranium	J. Waber J. O'Rourke Los Alamos Sci. Lab.	7/6/54
*AECD-3637	Separation of Americium from Lanthanum by Fractional Oxalate Precipitation from Homogen- eous Solution	J. Hermann Los Alamos Sci. Lab.	10/53
*AECU-312	A Procedure for the Complete Electrodeposition of Small Amounts of Ruthenium, May 31, 1954	J. Griess, Jr. Oak Ridge Nat'l Lab.	5/31/54
*AECU-833	Micro Syntheses with Tracer Elements; XX. The Synthesis of Ethyl Di(4-Hydroxycoumarinyl) Ace- tate (Pelentan) Labeled With $C^{14}$	B. Wayne A. Murray, III A. Ronzio, LASL	
*AECU-1288	Phase Diagram of Dilute Solutions of $He^3$ in $He^4$ Below the Lambda Point	H. Sommers, Jr. Los Alamos Sci. Lab	3/51
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*AECU-1309	The Faworskii Rearrangement of $\alpha$ -Halo-Ketones	R. Loftfield Harvard Univ. and Brookhaven Nat'l Lab.	
*AECU-1471	A Glass Pressure Vessel with Heating Jacket	J. Pomeroy Argonne Nat'l Lab.	6/51
*AECU-1559	On the Orientations of Zinc Crystals Produced by the Bridgman Method	L. Slifkin Illinois Univ.	
*AECU-1909	On the Anomalous Transparency of Thick Crystals to X-Rays	W. Zachariasen Argonne Nat'l. Lab.	2/5/52
*AECU-1910	Long-Lived Phosphorescence of $Ki-Tl$	B. Smaller Argonne Nat'l Lab.	12/51
*AECU-1911	Systematic Errors in Isotope Analysis Introduced by Mass Spectrometer Gas Sample Systems	R. Hayden Argonne Nat'l Lab.	1/30/52
*AECU-1923	The Solubility of Water in Liquid Phosphorus	G. Rotariu E. Haycock J. Hildebrand Calif. Univ., Berkeley	
*AECU-1925	The Temperature Dependence of the Solubility of Solid Nonelectrolytes	J. Hildebrand Calif. Univ., Berkeley	
*AECU-1934	Progress Report on the Behavior of Organic Compounds at the Dropping Mercury Electrode in Non-Associated Anhydrous Solvents	S. Wawzonek, R. Berkey, et al Iowa State Univ.	3/21/52
*AECU-1937	The Stability of Some Quaternary Ammonium Polyhalides in Ethylene Chloride	R. Buckles A. Popov, et al Iowa State Univ.	
*AECU-2626	Relationship of Pyridoxine and Its Derivatives to the Mechanism of Action of Isoniazid	I. Boone K. Woodward Los. Alamos Sci. Lab.	1952
*Microcard			

*AECU-2720	Some Physical Properties of the Deutero-Germanes	A. Zeltmann G. Fitzgibbon Los Alamos Sci. Lab.	1953
*AECU-2816	A Method for Sparking Thin Sheet Samples for Spectrographic Analysis: Application to Mn and Nb Analyses	F. Landis L. Pepkowitz Knolls Atomic Power Lab.	1/21/54
*AECU-2888	Chlorination of Some Aromatic Compounds Under the Influence of Gamma Radiation	D. Harmer L. Anderson J. Martin Univ. of Michigan	1952
*AECU-2889	Polymerization of Ethylene by Gamma Radiation	J. Anderson Univ. of Michigan	1953
*AECU-2903	Determination of Radioactive Cesium in Fission Products	R. Hahn R. Backer Wayne Univ.	1954
*AECU-2909	Glycolates and Lactates of Zirconium and Hafnium	R. Hahn R. Skonieczny Wayne Univ.	1954
*AECU-2910	Radiochemical Methods for the Determination of Phosphorus-32	R. Hahn R. Anderson Wayne Univ.	1954
*AECU-2911	Reactions of Hafnium Tetramandelate	P. Joseph Wayne Univ.	1954
*AECU-2917	Studies of Zirconium Tetramandelate	R. Hahn L. Weber Wayne Univ.	1954
*AECU-2922	Effect of Atomic Radiation on the Combustion of Hydrocarbon Air Mixtures	R. Cullen M. Gluckstein Univ. of Michigan	6/54
*Microcard			

*AERE-C/M-65	The Determination of Uranium in Uranium Mercury Alloy	M. Gibson	5/50
*AERE-C/M-151	A Simple Air Pulses Agitator Unit	K. Bagnall G. Miles	6/17/52
*AERE-C/R-438	Distribution of Nitric Acid Between Water and Ether	J. Sutton	11/49
*AERE-C/R-470	A Simple Technique for Semi-Micro Gas Analysis	L. Roberts P. Davidge	1/50
*AERE-C/R-599	A Miniature Hot Plate and Radiant Heat Dryer	F. Hudswell K. Wilkinson	10/50
ANL-5295	The Heats of Formation of Uranium Hydride Uranium Deuteride and Uranium Tritide at 25°C	B. Abraham H. Flotow	6/54
ANL-5298	A Continuous Flow pH Meter for High-Pressure Service	W. Marburger K. Anderson G. Wigle	7/54
*AWRE-O-12/54	The Spectral Characteristics of Some Organic Fluors	G. King Atomic Weapons Res. Estab., Berks, England	3/54
MISC-1954-53	Thermoluminescence Behavior in Inorganic Crystals	J. Rieke Univ. of Wisconsin	5/54
MISC-1954-57	Vibrational Relaxation Times for Diatomic Molecules at Various Temperatures	H. Penny H. Aroeste Calif. Inst. of Tech.	5/54
MISC-1954-63	A Study of Nuclear Resonance of the Supercooled Rotational Transition of 2,3-Diethylbutane; Technical Report on Contract N6 ONR-269, T.O. III and X	H. Segall J. Aston Penn. State College	6/25/54

\*Microcard

MISC-1954-64	Experimental Determination of Rotational Temperatures and Concentrations of OH in Flames From Emission Spectra. Tech. Report No. 14	S. Penner E. Bjornerud Calif. Inst. of Tech.	6/54
MISC-1954-70	Calculation of Energy Levels for Internal Torsion and Over All Rotation I. $\text{CH}_3\text{BF}_2$ Type Molecules	E. Wilson Jr. C. Lin D. Lide, Jr. Harvard Univ.	
MISC-1954-71	A Note on Saturation in the Microwave Spectrum of Methyl Chloride	G. Bird Harvard Univ.	
MISC-1954-73	Isotope Shift in X-Ray Spectra of Heavy Elements	G. Igo M. Wertheim Yale Univ.	6/54
MISC-1954-77	Effects of Internal Motion in the Microwave Spectrum of Methyl Amine	D. Lide, Jr. Harvard Univ.	
NBS-3307	Part 1. A Review of the Vapor Pressures of Methane and the Deuteromethanes. Part 2. Experimental Determination of the Vapor Pressures of Methane and the Deuteromethanes	G. Armstrong F. Brickwedde R. Scott	6/30/54
NBS-3314	High-Speed Machine Computation of Ideal Gas Thermodynamic Functions II. The Diatomic Free Radicals of the Isotopic Hydrides of Oxygen and Sulfur	L. Haar A. Friedman	5/31/54
*NP-4859 (suppl. 3)	Low Temperature Bibliography for the Field of Cryogenics. Supplement No. 3	Arthur D. Little, Inc.	1953
*NP-4859 (suppl. 4)	Low Temperature Bibliography for the Field of Cryogenics. Supplement No. 4	Arthur D. Little, Inc.	1953
*NP-5022	Reports on Boron Compounds (Abstract Bulletin U3)	Library of Congress	7/19/54
*NP-5263	The Lattice Constants of the Alkali Borohydrides and the Low-Temperature Phase of Sodium Borohydride	S. Abrahams J. Kalnajs Mass. Inst. of Tech.	7/54

\*Microcard



*NP-5264	The Crystal Structure of Barium Peroxide	S. Abrahams J. Kalnajs Mass. Inst. of Tech.	
*NP-5265	A Magneto-X-Ray Study of Magnetite at 78°K	S. Abrahams B. Calhoun Mass. Inst. of Tech.	7/54
ONRL-65-54	Technical Report, Notes on the Second Radioisotope Conference at Oxford	J. Tullis	8/9/54
*UMAEC-5-1954-1	Low Temperature Thermodynamic Studies on Pentaerythritol and Its Halide Derivatives	D. Payne (Thesis) Michigan Univ.	1953
USNRDL-435	An Estimate of the Predominant Chemical Species Resulting from a Shallow Underwater Burst of an Atomic Bomb	L. Bunney N. Ballou	2/5/54
*WADC-TR-53-353	Survey of Literature on Antioxidants and Anti-corrosion Additives for Lubricants at Elevated Temperatures	J. Cole, Jr. A. Burger A. Benton Virginia Univ.	5/54
*WAL-401/48/A-36	Research and Development of Methods of Chemical Analysis for Titanium Metal and Alloys. Final Tech. Report	H. Suss G. Pantchenko A. Aronson Sam Tour and Co., Inc.	1954

GEOSCIENCES

*AECU-1589	Adsorption Studies on Clay Minerals; I. Chromatography on Clays	J. Faucher, Jr. R. Southworth H. Thomas Yale Univ.	
*AECU-1942	An Investigation of the Mineralogy and Petrography of Uranium-Bearing Shales; Second Progress Report Period October 1 - January 1, 1952	Penn. State College	

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*GPR-1/54	Radioactivity Division General Progress Report for January - March 1954	Dept. of Mines and Tech. Surveys. Mines Branch (Canada)
*RME-4013	Bibliography and Index of Literature on Uranium and Thorium and Radioactive Occurrences in the United States. Part 4. Arkansas, Iowa, Kansas, Louisiana, Minnesota, Missouri, Nebraska, North Dakota, Oklahoma, South Dakota, and Texas	M. Cooper 1954 Div. of Raw Materials New York

ENGINEERING

*AECU-1494	Stresses in Perforated Sheets Due to Nonuniform Heating	G. Horvay 5/51 Knolls Atomic Power Lab.
MISC-1954-62	Nuclear Engineering - Part I	F. Van Antwerpen 1954 Amer. Inst. of Chem. Engineers
MISC-1954-62	Nuclear Engineering - Part II	F. Van Antwerpen 1954 Amer. Inst. of Chem. Engineers
*NACA-TN-3145	Analysis of Turbulent Heat Transfer, Mass Transfer, and Friction in Smooth Tubes at High Prandtl and Schmidt Numbers	R. Deissler 5/54 Lewis Flight Prop. Lab., NACA
*R53TL039	Alignment Chart for Sleeve Bearing Computations	D. Wilcox 3/2/53 M. Rosenblatt Thomson Lab., General Electric Co.

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## METALLURGY AND CERAMICS

*AECD-3635	Magnesium-Uranium Alloy System	G. Tracy P. Chiotti H. Wilhelm Ames Lab.	6/53
*AECU-2746	Formability and Weldability of Vapor-Deposited Molybdenum. Final Report	J. Wulff, A. Shaler, et al Mass. Inst. of Tech.	10/31/52
AECU-2884	An Investigation of Scaling of Zirconium at Elevated Temperatures. Quarterly Status Report No. 4 for March 2 to June 2, 1954	W. Baldwin, Jr. D. Garibotti Case Inst. of Tech.	6/10/54
*AECU-2906	The Role of Crystal Structure on Irradiation Effects on Metals	D. Wruck C. Wert Illinois Univ.	1954
AECU-2919	Relationship Between Small Angle Dislocation Boundaries and Creep	B. Ancker T. Hazlett E. Parker, Univ. of Calif.	6/54
BMI-933	High-Temperature Brazing of Nichrome V	H. Saller J. Stacy H. Klebanow	8/2/54
*BMI-X-112	A Method of Measuring the Contribution of Crystal Structure to the Hardness of Metals	W. Chubb	1953
*EES-040028D	Testing of Various Materials in High Temperature Waters	C. Lancaster Naval Engr. Expr. Station, Annapolis	11/30/53
*EES-040028F	Corrosion of Materials in High Temperature Waters	C. Lancaster W. Williams Naval Engr. Expr. Station, Annapolis	2/6/54
*Microcard			

*EES-040039A	Effect of Carbon Content on Marine Corrosion Resistance of Cast 19-9 Cr-Ni Steel	W. Williams Naval Engr. Expr. Station, Annapolis	9/28/53
ISC-405	Analysis of Thorium-Aluminum Alloys	R. Edwards C. Banks	9/9/53
MISC-1954-19	Thirty-Third Quarterly Report, to Sponsors of the Institute for the Study of Metals	Univ. of Chicago	6/54
MISC-1954-56	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. 7, Feb. 1954 - May 1954	N. Grant H. Chang, et al Mass Inst. of Tech.	
MISC-1954-59	Effect of the Structure of Dislocation Boundaries on Yield Strength; Eleventh Technical Report	J. Washburn Inst. of Eng. Res., UC	5/1954
MISC-1954-60	Low Temperature Creep of Zinc Single Crystals Twelfth Technical Report	C. Li J. Washburn E. Parker Inst. of Eng. Res., UC	5/54
MISC-1954-61	A Comparison Between Dislocation Theory and Experimental Measurements of Delayed Yield in Steel; Eighth Technical Report	T. Vreeland, Jr. D. Wood Calif. Inst. of Tech.	4/54
MISC-1954-65	Investigation of Materials for use in a Heat Transfer System Containing Liquid Lead or Bismuth; Final Report	O. Shepard J. Morgan R. Parkman Stanford Univ.	6/30/54
MISC-1954-66	Fundamentals of Glass-to-Metal Bonding IV. Wettability of Some Metals by Potassium Silicate and Sodium Borate Glasses; Fourth Tech. Report	J. Pask A. Kaminski D. Mitchell Univ. of Calif.	6/21/54
*NACA-TN-3209	High-Resolution Autoradiography	G. Towe H. Gomberg J. Freeman Univ. of Mich.	6/1/53

\*Microcard

*NP-5267	Research and Development for the Welding of Titanium and Titanium Alloys. Final Report Covering the Period Ending Dec. 10, 1951 to Jan. 31, 1953. The Welding of Titanium and Titanium Alloys	J. Chyle I. Kutuchief A. O. Smith Corp.	4/30/54
*NP-5268	Research in Electrical Properties of Intermetallic Compounds. Final Report for May 1, 1953 to June 30, 1954	T. Liu R. Bobone Horizons, Inc.	6/22/54
NYO-6260	The Adaptation of New Research Techniques to Mineral Engineering Problems	Project Res. Staff Mass. Inst. of Tech.	7/31/54
NYO-6295	Study of Metal-Ceramic Interactions at Elevated Temperatures, Quarterly Progress Report for the Period Ending July 1, 1954	F. Norton W. Kingery Mass. Inst. of Tech.	7/1/54
NYO-6322	Application of Chemical Thermodynamics to the Study of Alloy Formation, Progress Report for April 1, 1954 to July 1, 1954	R. Craig T. Brotherton, et al Univ. of Pittsburgh	7/12/54
NYO-6445	The Measurements of Thermal Conductivity of Refractory Materials. Quarterly Progress Report for the Period Ending July 1, 1954	F. Norton W. Kingery Mass. Inst. of Tech.	7/1/54
ORO-126	Thermal Expansion of Some Glasses in the System $\text{Li}_2\text{O}-\text{CaO}-\text{SiO}_2$	J. Handwerk T. McVay Univ. of Alabama	7/16/54
SEP-161	Rolling 18-8 Stainless Steel Powder into Strip	S. Storchheim B. Sprissler J. Nylin	7/5/54
*WADC-TR-53-470	The Development of Chromium-Base Heat-Resistant Alloys	J. Blocher, Jr. I. Campbell, et al Battelle Memo. Inst.	1/54
*WAL401/85-31	Titanium Phase Diagram Study. Final Report	H. Margolin J. Nielsen H. Work N. Y. Univ. Coll. of Engineering	4/15/54

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*AECU-870	Matrix Treatment of Relative Orientation of the Multiplex Aero Projector	W. Allen Los Alamos Sci. Lab.	
*AECU-1425	A Note on the U Operator	M. Neuman Brookhaven Nat'l Lab.	6/6/51
*AECU-1429	A Study of Convex Sets in Abstract Linear Spaces Where No Topology is Supposed; I.	W. Berg O. Nikodym Kenyon College	
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*AECU-1890	Range of Protons in Hydrogen and Oxygen	C. Cook E. Jones T. Jorgensen Nebraska Univ.	
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*AECU-1948	Monotonic Set Functions and Convex Sets	P. Hammer A. Sobczyk Los Alamos Sci. Lab	
*AECU-1959	Synchrotron Project; Progress Report	Purdue University	6/1/51
*AECU-1964	Cross Section of the $D(T, n)He^4$ Reaction for 80 to 1200 kev Tritons	H. Argo R. Adair, et al Los Alamos Sci. Lab	
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*AECU-2655	Inelastic Scattering of Protons and Neutrons by Deuterons	R. Frank J. Gammel Los Alamos Sci. Lab	1953
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*AECU-2760	Operating Experience with the Los Alamos 701	W. Bouricius Los Alamos Sci. Lab	1953
*AECU-2890	Studies of the $\text{Li}^6(n, \alpha)\text{H}^3$ Reaction with Nuclear Emulsion. Final Report.	J. Roberts Northwestern Univ.	12/21/53
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CERN-PS/A. Sch. 1	Possible Variations of the Guiding Field in a Synchrotron due to Transients in the Magnet Circuit	Europ. Council of Nuclear Res.	7/22/54

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*CRGP-570	Small Halogen-Quenched Geiger Counters Development Work to March 1954	L. Watt I. Fowler Chalk River, Ontario	5/10/54
*CRT-556	Tables of Coefficients for Angular Distribution Analysis	W. Sharp J. Kennedy, et al Chalk River Project	12/53
D-4.250.27	Full Sized Beta Drain Experiment		
HW-31961	Excitation of Characteristic X-Rays by $\beta$ -Particles	M. Leboeuf B. Stark	5/27/54
*ISC-468	Mechanism of Hindered Settling And Fluidization	A. Loeffler, Jr. B. Ruth Ames Lab.	1953
ISC-492	Variations of Electrophotoluminescence Phenomena with Frequency of Applied Field	K. Olson G. Danielson Ames Lab	6/54
KAPL-1108	Facilities and Instrumentation for Improved Resolution with G. E. Betatron Velocity Selector	M. Yeater E. Gaerttner W. McRoberts	6/4/54
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MISC-1954-55	Absorption of Negative Mesons in Carbon	T. Godfrey Princeton Univ.	5/20/54
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MISC-1954-74	Aperture Requirements and Choice of n-Value	E. Courant Brookhaven Nat'l Lab	6/14/54
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*MTR-L-54-42	MTR Crystal Spectrometer Data Printing System	G. Smith L. Miller Phillips Petroleum Co.	6/23/54
*NAA-SR-839	Operation of a Water Boiler Neutron Source	M. Remley	11/20/53
*NAVORD-2666	Gamma Ray Sources and Techniques for Gamma Ray Radiography	J. Hirschfield D. O'Connor D. Polansky Naval Ordnance Lab.	2/26/53
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*OSR-TN-54-154	Reciprocity Law Failure in Desensitized Emulsions	S. Thtihasi Univ. of Rochester	6/54
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*SCLE-E-1127	Solids Subjected to a Constant Rate of Generation of Lattice Defects	J. Rothstein Evans Signal Lab.	1953
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*AD-21666	An Investigation of Methods of Determining the Liquid Level in the North Carolina State College Nuclear Reactor	C. Burnette, Jr. (Thesis) No. Carolina State Coll.	1953
*CF-53-7-137	Current Status of the Theory of Reactor Dynamics	W. Ergen	7/20/53
*NEPA-1446	Calibrating of the NEPA Standard Pile	F. Maienschein W. Baker Fairchild Engine and Airplane Corp.	6/16/50
*NP-5262	Studies in Fluorination Reaction Design	E. Tyczkowski Duke Univ.	1953

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*AECU-1507	Radiological Monitoring for Civil Defense	J. Kuper Brookhaven Nat'l Lab	
*AECU-1957	Report for the Period Oct. 21, 1950 to Oct. 20, 1951 and Proposed Program and Budget for the Period Feb. 1, 1952 to Jan. 31, 1953	P. Yankwich Illinois Univ.	
*AECU-2492	Atmospheric Turbulence Study; Annual Progress Report for May 1, 1951 - July 31, 1952	R. Fleagle F. Badgley Washington Univ.	7/52
*CRR-548-A	Report on Atomic Power Symposium Held at Chalk River, Ontario, Sept. 9, 10, and 11, 1953	W. Henderson	
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NP-3104	Final Progress Report (Section 2) Covering Period June 15, 1948 through October 15, 1950, on Continuous-Tone Electrostatic Electrography	R. Benson C. Carlson, et al The Haloid Co., N. Y.	
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UCRL-2186 (rev.)	The Effect of Thiocetic Acid on the Quantum Efficiency of the Hill Reaction	D. Bradley M. Calvin	5/19/54
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