

Lawrence Berkeley National Laboratory

Recent Work

Title

LIST OF UNCLASSIFIED REPORTS RECEIVED AND ISSUED IN THE UCRL INFORMATION DIVISION DURING THE PERIOD OF AUGUST 1-15, 1954

Permalink

<https://escholarship.org/uc/item/6423m2p0>

Author

Lawrence Berkeley National Laboratory

Publication Date

1954-08-19

UCRL 2679
UNCLASSIFIED

UNIVERSITY OF
CALIFORNIA

*Radiation
Laboratory*

TWO-WEEK LOAN COPY

*This is a Library Circulating Copy
which may be borrowed for two weeks.
For a personal retention copy, call
Tech. Info. Division, Ext. 5545*

BERKELEY, CALIFORNIA

DISCLAIMER

This document was prepared as an account of work sponsored by the United States Government. While this document is believed to contain correct information, neither the United States Government nor any agency thereof, nor the Regents of the University of California, nor any of their employees, makes any warranty, express or implied, or assumes any legal responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights. Reference herein to any specific commercial product, process, or service by its trade name, trademark, manufacturer, or otherwise, does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government or any agency thereof, or the Regents of the University of California. The views and opinions of authors expressed herein do not necessarily state or reflect those of the United States Government or any agency thereof or the Regents of the University of California.

UCRL-2679
Internal Distribution

UNIVERSITY OF CALIFORNIA
Radiation Laboratory
Contract No. W-7405-eng-48

LIST OF UNCLASSIFIED REPORTS RECEIVED AND ISSUED IN THE UCRL
INFORMATION DIVISION DURING THE PERIOD OF AUGUST 1-15, 1954

August 19, 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 -Jount 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 AND ISSUED IN THE UCRL
INFORMATION DIVISION DURING THE PERIOD OF AUGUST 1-15, 1954

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

August 19, 1954

Index Number	Title	Author	Date
BIOSCIENCES			
*AD-9426	Radiation Sensitive Glasses. Quarterly Report No. 3	L. Reiffel	3/10/53
*AEC-TR-1737	The Effect of Roentgen Radiations on the Connective Basophile Granulous Cells (Mastzellen) of the Skin of Man	A. Novaro	1952
*AECD-2635	Master-Slave Manipulator	R. Goertz	3/7/49
*AECD-2748	The Beta-Gamma Surface Dosage Rate from Natural Uranium	B. Kalmon	8/22/49
*AECD-2828	An Interspecies Comparison of the Radiotoxicities of X Ray, SR ⁸⁹ , and PU ²³⁹	C. Prosser M. Swift	6/49
*AECD-2892	A Rapid Sensitive Direct Method for the Routing Determina- tion of Radium in Urine and Other Biological Materials	E. Russell R. Lesko J. Schubert	2/28/50
*AECD-3291	Treatment of Radioactive Waste Solutions	C. Hirsch	1/4/52
*AECD-3296	Excerpts from The Metabolism of Carrier-Free Fission Products in the Rat	K. Scott R. Overstreet, et al	1/25/52
*AECD-3354	Medical and Health Physics Quarterly Report; July, August, and September, 1951		11/5/51
*AECD-3361	Handbook on Air Cleaning (Particulate Removal)	S. Friedlander, et al	4/18/52

*Microcard

*AECD-3629	Fixation of Mixed Fission Product Activity by Soils of the Savannah River Project	T. Tesdahl, et al	2/25/52
*AECD-3632	Decontamination of Liquid Wastes by Iron Sulfide, Iron Hydroxide, and Calcium Phosphate Precipitations	C. Lowe, et al	12/28/53
*AECU-7	The Induction of Mutations in Paramecium Aurelia by Beta Radiation	R. Kimball	10/29/48
*AECU-8	Enzymatic Hydrolysis of Peptides of Asparagine	C. Carter	11/2/48
*AECU-17	A Study of Blood and Salivary Lysozyme in the X-Irradiated Dog	L. Bennett, et al	11/1/48
*AECU-18	The Inhalation Toxicity of Sodium Acid Sulfate Mist at 75 Mg/M ³ in Animals	G. Sprague, et al	11/12/48
*AECU-147	A Two-Week Beryllium Sulfate Mist Inhalation Study in Animals at a Concentration of 100 MG/M ³	G. Sprague, et al	1949
*AECU-165	The Inhalation Toxicity of Beryllium Sulfate Mist in Animals at a Concentration of 10 MG/M ³ for 95 Days	G. Sprague, Jr., et al	2/24/49
*AECU-374	Toxicity of Tellurium	P. Glass	7/25/47
*AECU-2425	Lanthanum and Other Rare Earth Elements, Calcium and Phosphorus in Cancer 5-1-51 - 4-30-52		
*AECU-2450	Potentialities of Utilizing Radiation from Fission Materials for the Production of Canned Meat Products	L. Brownell L. Kemps J. Graikoski	1952
*AECU-2623	The Effects of Large Doses of Parathyroid Extract, Vitamin D, and Dihydrrotachysterol on Mice and Rats Following Administration of Radioactive Calcium and Strontium	W. Anderson G. Zander	
*AECU-2652	Progress Report	Harvard Univ.	1/1/53

*Microcard

*AECU-2653	Rate of Uptake and Toxic Dose on a Spore Weight Basis of Various Fungicides	L. Miller S. McCallan R. Weed	1953
*AECU-2654	The Chemistry and Biosynthesis of Isotopically Labeled Cellulose. Progress Report, April 10, 1953		
*AECU-2659	The Effects of Starvation on Photoreactivation in Colpidium Colpoda	A. Giese, et al	1953
*AECU-2665	Concentration of Radioisotopes by Activated Sludge; Progress Report Covering Period April 1, 1952 to May 31, 1953	W. Kaufman G. Klein A. Greenberg	5/31/53
*AECU-2674	Formation of 5'-Ethylthioadenosine from DL-Ethionine in Yeast	F. Schlenk J. Tillotson	1953
*AECU-2677	Brain Potassium Exchange in Normal Adult and Immature Rats (thesis)	R. Katzman P. Leiderman	1953
*AECU-2680	Studies on Low Dose X-Irradiations and its Effect Upon the Biochemistry and Pathology of the Dog. Progress Report, June 1952 to May 1953	P. Phillips	1953
*AECU-2681	The biosynthesis of Nucleic Acids in the Livers of Adult Mice	J. Fresco A. Marshak	
*AECU-2682	A Hemorrhagic Disorder Occurring in Patients with Congenital Heart Disease	R. Hartmann	
*AECU-2683	The Metabolism of Pregnane-17 α , 21-DIOL-3, 20-DIONE and Pregnane-17 α , 21-DIOL-3, 11, 20-TRIONE in Vivo	F. Ungar, et al	1953
*AECU-2695	The Effects of Irradiation from Atomic Bomb Fall-Out Upon a Group of Hereford Cattle (thesis)	J. Bird	3/52
*AECU-2697	Effects of Ionizing Radiations (and other Agents) on the Developing Mammal	S. Hicks	

*Microcard

- *AECU-2705 The Physiology and Genetics of Plant Pathogenic Micro-organisms when grown in the Presence of Various Radioisotopes T. Kommedahl, et al 6/53
- *AECU-2710 (Utilization of Fission Products) Gamma-Ray Sterilization of Food Packaging Materials L. Kempe
J. Graikoski
L. Brownell 1953
- *AECU-2718 Utilization of Gross Fission Products. Progress Reports (of University of Chicago, Food Research Institute, and American Meat Institute Foundation) for Period Ending March 31, 1953 J. Baarli, et al
- *AECU-2723 Specificities of the Binding to Rabbit Serum D. Pressman
M. Siegel 1953
- *AECU-2724 The Sedimentation Behavior of the Thyroxine-Binding Protein of Human Serum in the Ultra-Centrifuge Partition Cell M. Petermann
J. Robbins
M. Hamilton 1953
- AECU-2725 Identification of Thyroglobulin in Human Serum After Large Doses of I¹³¹. 2. Sedimentation of Serum I¹³¹ in the Ultracentrifuge
- *AECU-2726 On the Nature of Xanthine and Substituted Xanthines in Solution L. Cavaliere, et al 1953
- *AECU-2730 Removal of Radioisotopes by Sewage Treatment Processes. Progress Report No. 2 Covering the Period April 1, 1952 to May 31, 1953. Concentration of Radioisotopes by Activated Sludge W. Kaufman
G. Klein
A. Greenberg 5/31/53
- *AECU-2750 A Device for Placement of Cobalt-60 Within Rigid or Flexible Tubing for Use in Cancer Therapy G. Callendine, Jr.
J. Morton 1953
- *AECU-2753 The Entry of Nutrients Through the Bark and Leaves of Deciduous Fruit Trees as Indicated by Radioactive Isotopes (thesis) R. Ticknor 1953

*Microcard

AECU-2764	Research Pertaining to X-Radiation Damage in the Parasitic Wasp, Habrobracon. Final Report for the Period July 1, 1950 to August 31, 1953	A. Clark	11/30/53
*AECU-2772	Studies on Sodium Desoxyribonucleate From Pneumococcus Type III.	V. Koenig L. Larkins J. Perrings	1953
*AECU-2768	Sedimentation and Viscosity Studies on the Capsular and Somatic Polysaccharides of Pneumococcus Type III	V. Koenig J. Perrings	1953
*AECU-2775	The Metabolism of C ¹⁴ Labeled Ethylenediaminetetraacetic Acid in Human Beings	H. Foreman T. Trujillo	1953
*AECU-2781	Effect of Nutritional State on Photoreactivation in Didinium Nasutum	A. Giese C. Brandt D. Shepard	1953
*AECU-2833	Isolation of C ¹⁴ Labeled DPN and TPN By Paper Chromatography from Lactobacillus Flantarum	I. Boone D. Turney K. Woodward	1953
*AECU-2835	Specific Ionization and Relative Biological Effectiveness of Ionizing Radiations in Mammalian Systems. The Application to the Problem of Cosmic Ray Hazards	J. Storer A. Krebs J. Furchner	1954
*AECU-2836	The Treatment of Post-Irradiation Infection	C. Hammond	1953
*AECU-2837	Oxidation Bonds - Radioactivity Uptake and Algae Concentration	E. Steel E. Gloyna	2/28/54
*AECU-2849	Cytology of Bacteria. 1. The Bacterial Cell	S. Mudd	1954
*AECU-2859	Evaluation of Laboratory Fume Hoods	H. Schulte, et al	1953
*AECU-2867	Biochemical Aspects of Atherosclerosis	G. Gould	1953
AECU-2885	Investigation of Gamma Sterilization, Research Report No. 5-53	B. Morgan Nat'l. Cannery Assoc.	6/53

AECU-2886	Investigation of Gamma Sterilization, Research Report No. 7-53	B. Morgan Nat'l. Canners Assoc.	12/53
AERE-I/R-1386	The Preparation for Dispensing of Miscellaneous Radioisotopes	F. Hudswell, et al Atomic Energy Res. Estab. Harwell, Berks., England	4/20/54
AERE-M/M-71	The Construction and Calibration of a 100 Curie Gamma Irradiator	A. Charlesby O. Flint Atomic Energy Res. Estab.	5/13/54
*AMRL-94	A Study of Combined Thermal Radiation Burn and X-Irradiation Effects on Mice	W. Parr, et al	9/4/52
*AMRL-110	The Influence of Ionizing Radiation on Mitosis in the Corneal Epithelium of the Rat. 1. Morphological Changes Induced by X-Irradiation and the Effectiveness of Bal and Cysteine in Reducing the Frequency of These Changes	R. Ransom	1/12/53
*AMRL-119	Histopathology of the Rat Pituitary Following Total Body X-Irradiation	R. Korson A. Botkin	7/9/53
MISC-1954-36	Radiological Health Handbook	S. Kinsman, et al U. S. Dept. of Health	4/54
*ML-166	Development of 6 Mev Linear Accelerator for Medical and Radiographical Applications. Status Report (For) March 1 - May 31, 1952		
*ML-167	Development of 6 Mev Linear Accelerator for Medical and Radiographical Applications. Status Report (For) June 1 - August 31, 1952		
MONOGRAPH-2212	Soil-Block Bioassay of a Creosote Containing Pentachlorophenol	L. Snoke	2/54
MONOGRAPH-2238	Observations on a Possible Method of Predicting Soilblock Bioassay Thresholds by Distillation Characteristics of the Weathered Creosotes	L. Snoke	4/54

*Microcard

NYO-4439	A Study of the Lime-Soda Softening Process as a Method for Decontaminating Radioactive Waters	R. McCauley R. Lauderdale R. Eliassen MIT	9/1/53
NYO-4600	Decontamination of Buildings used for Processing Alpha Emitters	P. Klevin W. Harris H. Blatz	4/29/54
NYO-4961	The Use of P ³² in the Identification of Intraocular Tumors	J. Krohmer, et al	6/23/54
*ORO-77	Agricultural Research Program Quarterly Progress and Work Accomplishment Report for Quarter Ending June 30, 1952	Tennessee Univ.	
ORO-104	Studies of Liver Physiology and Pathology Involving the Use of Bromsulfalein Containing S ³⁵ . Final Report	R. Brauer J. Krebs E. Pressotti	1952
ORO-116	Quarterly Progress Report (For) October 1-December 31, 1953	OR Inst. of Nuclear Studies	
UCLA-300	An Empirical Treatment of the Porosity Function in the Kozeny Equation	W. Burke, Jr. L. Baumash	7/29/54
UR-332	<u>In Vivo</u> Localization of Labeled Rat Adrenal Antibodies	I. Spar W. Bale	6/16/54
UR-334	Study on Flash Burns: Evaluation of Simultaneous Monitoring of the Carbon ARC Source	K. Berkley T. Davis	7/1/54
UR-335	Study on Flash Burns: The Influence of Ultraviolet Radiation on the Production of Cutaneous Burns	K. Berkley	7/1/54
USNRDL-438	Spleen Desoxyribonucleic Acid Content as an Index of Recovery in X-Irradiated Mice Injected with Spleen Homogenate	L. Cole M. Ellis	8/2/54
*UUT-2	Shielding Efficiency of Remote Handling Cell and Monitoring Room. (Dugway Project)	G. Abel K. Anderson E. Campagna	1/27/54

CHEMISTRY

ACCO-49	Chemistry of Vanadium, A Summary of the Non-Project Literature Through November, 1952	A. Frank	6/25/54
*AD-10934	Preparation of NO-NO ₂ Mixtures from the FMC Nitrogen Fixation Furnace. Progress Report No. 7	E. Engler W. Lindsay	1/53
*AEC-TR-1591	Preliminary Experiments on the Electrodeposition of Titanium and Its Alloys	N. Gratsianskii E. Vovkogen	1953
*AEC-TR-1678	The Reaction of Nitrites with Amino-Sulfonic Acid and an Identification and Determination of Nitrous Acid in the Presence of Nitric Acid	P. Baumgraten I. Marggraff	1930
*AEC-TR-1680	Observation on the Determination of Nitrogen in Gaseous Mixtures	L. Chopin	1946
*AEC-TR-1681	A Rapid Method for Qualitative Analysis: I. Some Specific Reactions of Ordinary Cations and Anions	G. Gutzeit	1952
*AEC-TR-1685	Apparatus for the Determination of Impurities in Inert Gases	P. Burbo	1953
*AEC-TR-1687	Accumulation of Heavy Water by Counter-Current Electrolysis	H. Martin E. Ruhtz	1950
*AEC-TR-1689	The Preparation of Lithium Hydride	P. Albert J. Mahe	1950
*AEC-TR-1717	A New Method for the Determination of Lithium Oxide by Means of Fluorides	A. Carnot	
*AEC-TR-1718	The Determination of Lithium Oxide	A. Carnot	1953
*AEC-TR-1740	A Metallic Compound of Lithium and Ammonia. Electrical Conductivity and Galvanomagnetic Effect	H. Jaffle	1939
*AEC-2324	Radioactive Tracers	A. Reid A. Weil	

*Microcard

*AECD-2740	The Preparation of Uranyl Carbonate and Measurement of Its Solubility	P. Miller H. Pray H. Munger	8/1/49
*AECD-2861	The Use of Ether Extraction for the Analytical Separation of Uranium	N. Furman R. Mundy G. Morrison	
*AECD-2863	The Entropy and Low-Temperature Heat Capacities of Neptunium Dioxide	E. Westrum, Jr. J. Hatcher D. Osborne	7/28/50
*AECD-2870	The Fluorophotometric Determination of Uranium	G. Price R. Ferretti S. Schwartz	4/47
*AECD-2940	The Nephelometric Determination of Chloride in Uranium	S. Wexler L. Myers	5/10/50
*AECD-3112	Microestimation of Vanadium in Uranium	G. Cowan	3/22/51
*AECD-3114	The Diphenylcarbazide Method for Chromium	G. Fassett, et al	3/22/51
*AECD-3115	Polarographic Determination of Lead in Beryllium	R. Bane	1946
*AECD-3131	A Rapid Determination of Bismuth	A. Stehney G. O'Conner H. Potratz	3/30/51
*AECD-3140	Progress Report on Carnotite Studies; Carbonate Process	K. Brown C. Coleman	7/49
*AECD-3293	Reactions Involving Optically Active Styrene Oxide	F. Hayes R. Foss B. Rogers	1/14/52

*Microcard

*AECD-3295	Evaluation of a Cottrell Electrostatic Precipitator on a Radiochemical Process off-Gass System	J. Suddath	11/26/51
*AECD-3309	A Survey of Calutron Charge Materials for Stable Isotope Separations	C. Keim	11/14/51
*AECD-3319	Micro Syntheses with Tracer Elements. XXXI. The Synthesis of Ethylenediamine Tetra-(2-C ¹⁴ -Acetic) Acid	A. Murray, III A. Ronzio	2/25/52
*AECD-3338	Radiochemical Pilot Plant Development at the Oak Ridge National Laboratory	H. Jackson J. Ullmann	2/4/52
*AECD-3380	Rad Purification, Po Preparation, and Calibration of Measuring Apparatus	R. Prestwood	1/21/54
*AECD-3416	The Determination of Oxygen in Sodium	J. White W. Ross R. Rowan, Jr.	4/30/52
*AECD-3422	Effect of Fluoride on the Gravimetric Determination of Zirconium in Zirconium Fluoride	R. McCutchen C. Susano	6/3/52
*AECD-3426	Determination of Nitrogen Present as Ammonia and Nitrate in Uranyl Sulfate and Uranium Oxides	W. Wright, Jr.	11/23/51
*AECD-3443	The Crystal Structures of NpC and Pu ₂ O ₃	D. Templeton C. Dauben	7/14/52
*AECD-3447	Protactinium (IV) in Solution	S. Fried J. Hindman	7/52
*AECD-3488	The Electrical Conductivity of Uranyl Sulfate and Uranyl Fluoride in Aqueous Solution	R. Brown, et al	1952
*AECD-3489	Neutron Activation Analysis: A Useful Analytical Method for Determination of Trace Elements	G. Leddicotte	1/2/53
*AECD-3491	Colorimetric Determination of Zirconium	H. King W. Owens	10/27/52

*Microcard

*AECD-3493	Heat and Free Energy of the Reaction $\text{AmCl}_3(\text{s}) + \text{H}_2\text{O}(\text{g}) = \text{AmOCl}(\text{s}) + 2\text{HCl}(\text{g})$	C. Koch B. Cunningham	11/10/52
*AECD-3498	Analysis of Uranium Oxide-Polystyrene Mixtures		10/52
*AECD-3559	The Analytical Chemistry of Americium and Curium	A. Chetham-Strode, Jr.	6/15/53
*AECD-3599	The Crystal Structure of KPuO_2CO_3 , $\text{NH}_4\text{PuO}_2\text{CO}_3$, $\text{RbAmO}_2\text{CO}_3$	F. Ellinger W. Zachariassen	1953
*AECD-3606	Modifications of the Dimethylglyoxime Method for the Colorimetric Determination of Nickel Based on the Use of Potassium Persulfate as the Oxidant	M. Druschel O. Menis R. Rowan, Jr.	11/3/52
*AECD-3627	The First Crystallographic Data for Curium Compounds	L. Asprey F. Ellinger	1953
AERE-C/R-1377	The Separation and Purification of Americium-241 and the Absorption Spectra of Trivalent and Pentavalent Americium Solutions	G. Hall P. Herniman	1/28/54
AERE-C/R-1398	A Simple Infra-Red Grating Spectrometer for Use in Analysis	J. Gaunt Atomic Energy Res. Estab. Harwell, Berks. England	4/9/54
AERE-CE/R-1119	The Mechanism of Mass Transfer of Solutes Across Liquid-Liquid Interfaces. Part 2. The Transfer of Organic Solutes Between Solvent and Aqueous Phases	J. Lewis Atomic Energy Res. Estab.	4/6/54
AERE-GP/M-167	Preparation of Anhydrous Tungsten Hexachloride	C. Richards M. Smith Atomic Energy Res. Estab.	2/17/54
AERE-M/R-1410	The Thermal Decomposition of Beryllium Hydroxide	P. Murray R. Thackray Atomic Energy Res. Estab.	3/31/54

*AF-TR-6519 (pt. 2)	Materials for Handling Fuming Nitric Acid. Part 2. Properties of Fuming Nitric Acid with Reference to its Thermal Stability	M. Fontana	11/52
ANL-5251	A Mass Spectrometer for Routine Solid Analyses	C. Stevens M. Inghram	4/54
ANL-5271	Revised Radiochemical Iodine Analytical Procedure	E. Turk	7/54
*AECU-10	Bibliography: The Analytical Chemistry of Beryllium	C. Banks J. McClure H. Meek	10/48
*AECU-34	Physical Properties of Chlorotrifluoroethylene Polymers. III. Density and Viscosity of Chlorotrifluoroethylene Polymers as a Function of Temperature	J. Gabbard R. Alvarez, et al	12/31/48
*AECU-46	Preparation of Metallic Nickel Films by Means other Than Electro-Deposition and Vacuum Sublimation	F. Croxton	12/24/48
*AECU-48	Note on Improvements in Spectrochemical Techniques	E. Leslie	12/28/48
*AECU-50	Conference on the Chemical Effects of Nuclear Transformations (Hot Atom Chemistry); Chemistry Conference #1; Aug. 19-20, 1948	Brookhaven Nat'l. Lab.	
*AECU-57	A Micro Method for the Determination of the Nucleic Acids	R. Steele T. Sfortunato L. Ottolenghi	
*AECU-133	Physico-Chemical Studies of Beryllium Complexes. I. Complexing of Beryllium By Citrate	I. Feldman W. Neuman, et al	1/19/49
*AECU-170	Studies in the Hyaluronidase - Hyaluronic Acid System; I. The Effect of X-Irradiation on Hyaluronic Acid	A. Mathis R. Brooks H. Schneiderman	2/11/49
*AECU-2656	Concentration of Nitrogen 15 by Chemical Exchange Between NO ₂ and NO; Semi-Annual Progress Report for Period from June 15, 1952 to January 15, 1953	W. Spindel E. MacLaren, et al	

*Microcard

*AECU-2657	Acid-Base Exchange Reactions in Liquid Hydrogen Sulfide	T. Norris R. Smith	1951
*AECU-2661	The Separation of Sodium from Potassium by Means of Ion-Exchange Chromatography	W. Arons A. Solomon P. Brigham Hosp., Boston	1952
*AECU-2693	Kinetics of the Alkaline Decomposition of 1,3-Dinitro-1,3-Diazacyclopentane	W. Jones	1953
*AECU-2700	A New Form of Uranium Hydride	R. Mulford F. Ellinger W. Zachariasen	1953
*AECU-2701	A Spectrophotometric Investigation of the Equilibria Existing in Acidic Solutions of Chromium (VI)	J. Tong E. King	1953
*AECU-2708	Sulfostyrenes. Preparation and Polymerization of Potassium p-Vinylbenzenesulfonate	R. Wiley, et al N. Smith	1953
*AECU-2727	The Crystal Structure of NaHg_2 , NaHg and Na_3Hg_2	J. Nielsen N. Baenziger	1953
*AECU-2728	The Crystal Structures of ZrBeSi and ZrBe_2	J. Nielsen N. Baenziger	1953
*AECU-2748	The Vapor Phase Photolysis of Methyl Cyclopropyl and Methyl Cyclobutyl Ketones (thesis)	I. Norman	6/53
*AECU-2751	Ion Exchange of Trace Components in a Counter-Current Equilibrium Stage Contactor. Technical Report No. 3	N. Hiester R. Phillips, et al	4/1/53
*AECU-2752	An Investigation of Certain Physical Properties of Halogen Fluorides (thesis)	H. Thompson, Jr.	1953
*AECU-2761	Infrared Absorption Spectra of Aqueous HF_2 , DF_2 and HF	L. Jones R. Penneman	1953

*Microcard

*AECU-2777	Infrared Absorption Studies of Aqueous Complex Ions: Part 1. Cyanide Complexes of Ag(I) and Au(I) in Aqueous Solution and Adsorbed on Anion Resin	L. Jones R. Penneman	1953
*AECU-2778	The Infrared Spectra of Some Phenloxazoles and Related Compounds	V. Koenig F. Hayes, et al	1953
*AECU-2788	A Study of Properties of Nonelectrolytic Solutions. Final Report	S. Wood	10/53
*AECU-2793	Thermolysis of Zinc-Monosalicylaldehyde	J. Rynasiewicz J. Flagg	1953
*AECU-2799	Polarized Infrared Spectrum of $\text{KAu}(\text{CN})_2$: Revision and Refinement	L. Jones	1953
*AECU-2808	The Exchange Reaction Between Substituted Benzyl Iodides and Potassium Iodide. 2. <u>p</u> -Nitrobenzyl Iodide	E. Purlee M. Kahn J. Riebsomer	1953
*AECU-2815	The Infrared Spectrum of σ_2 for B^{10}F_3 and B^{11}F_3	A. Nielsen	12/10/53
*AECU-2832	A Method for Measuring Thoron	S. Shlaer	
*AECU-2834	Annual Report on the Study of the Kinetics of Rapid Reactions	W. Schrenk R. Peabody	2/54
*AECU-2838	Micro Syntheses with Tracer Elements. 34. The Synthesis of C^{14} Labeled Caffeine	A. Murray, III A. Ronzio	1953
*AECU-2841	The Solubility of Uranium (IV) Hydroxide in Solutions of Sodium Hydroxide and Perchloric Acid at 25°C	K. Gayer H. Leider	1954
*AECU-2842	The Solubility of Thorium Hydroxide in Solutions of Sodium Hydroxide and Perchloric Acid at 25°C	K. Gayer H. Leider	1954
*AECU-2843	The Solubility of Uranium Trioxide, $\text{UO}_3 \cdot \text{H}_2\text{O}$, In Solutions of Sodium Hydroxide and Perchloric Acid at 25°C	K. Gayer H. Leider	1954

*Microcard

*AECU-2844	Induction of Chemical Reaction in a High Frequency Discharge, Technical Report No. 1. Fixation of Nitrogen	W. Partridge B. Zwolinski R. Parlin	6/30/53
*AECU-2846	The Infrared Absorption Spectra of Nucleic Acids, Amino Acids and Related Compounds. Final Report		1952
*AECU-2851	A Spectrographic Method for Thorium. Final Report	F. Lindstrom	8/53
*AECU-2865	The Crystal Structure of $[(CH_3)_4N]_2CeCl_6$	D. Cromer R. Kline	1953
*AECU-2872	Progress Report for the Period January 1, 1953 through March 31, 1953	W. Smothers Univ. of Arkansas	4/20/53
*AECU-2873	Progress Report for the Period April 1, 1953 through June 30, 1953	W. Smothers Univ. of Arkansas	7/30/53
BNL-294 (T-50)	Progress Report on Fission Products Utilization. VI. Further Studies of the Effect of Gamma Radiation on Vinyl Polymer Systems	D. Ballantine A. Glines, et al	3/54
*BNL-1639	The Occurrence and Control of Radioactive Entrainment in Evaporative Systems	B. Manowitz R. Bretton R. Horrigan	10/53
*COO-141	Surface Areas of Finely Divided Materials		7/1/53
*COO-142	Surface Areas of Finely Divided Materials		9/1/54
*CCC-1024-TR-2	Melting Point Diagrams of Alkali Halide and of Alkali Borohydride Systems	G. Huff R. Shakely	1/13/54
*CCC-1024-TR-3	Alkali and Alkaline Earth Halide, Fluoborate and Borate Systems		1/28/54

*Microcard

*CCC-1024-TR-4	Metering of Gases Including Diborane	C. Thomas D. Eads	1/29/54
*CCC-1024-TR-16	Thermodynamic Functions for Borine Carbonyl	H. Galbraith J. Masi	4/12/54
CEA-256	Utilisation Rationnelle D'Un Spectrometre Detecteur De Fuites	R. Geller	1954
*COO-184	Carbon-Chlorine Bond Fission in the Chloromethyl Groups Polarographic Behavior of the Chloroethanols	P. Elving C. Bennett	1/8/54
*COO-185	Polarographic and Coulometric Behavior of the Chloroacetaldehydes	P. Elving C. Bennett	1/27/54
IDC-14072	Operating Manual, Chemical Department, Part 8. Methods of Analysis	R. Divine J. Kelley, et al Amer. Cyanamid Co.	4/29/52
*ISC-481	High Temperature Crystal Structure of Thorium	P. Chiotti	4/30/54
ISC-494	Preparation and Properties of Calcium Zirconate	M. Nadler E. Fitzsimmons	6/24/54
ISC-501	Infrared Functional Group Analysis of Aryl Silanes	M. Margoshes V. Fassel	7/8/54
ISC-502	The Infrared Spectra of Aromatic Compounds. I. The Out-of-Plane C-H Bending Vibrations in the Region 625-900 CM^{-1}	M. Margoshes V. Fassel	7/12/54
*MGC-1023-TR-19	A Boron Halide Investigation (thesis)	C. Wayne Bills	11/12/53
MONOGRAPH-2231	Distribution of Solute in Crystals Grown from the Melt	J. Burton, et al	11/53
NAA-SR-996	Rapid Spot Tests for the Identification of Biphenyl, o-, m-, and p-Terphenyl and Certain Other Polyphenyls	L. Silverman W. Bradshaw	7/15/54
*NP-4209	Thermodynamic Functions of Polyelectronic Atoms at Very High Temperature (thesis); Technical Report No. 7	R. Meghreblian	11/52

*Microcard

*NP-5132	Development of Polynuclear Aromatic Compounds for Use as High-Temperature Lubricants and Related Materials. Quarterly Report No. 1 (For) August 1 - November 1, 1953	C. Raley, Jr.	11/15/53
*NP-5153	Preparation and Properties of Inorganic Hydrides. Period Covered: August 31, 1951 to December 31, 1953	A. Finholt	3/1/54
	The Reduction of Isocyanates and Isothiocyanates with Lithium Aluminum Hydride	A. Finholt C. Anderson C. Agre	1953
	The Reduction of Carbon Dioxide to Formic Acid with Lithium Aluminum Hydride	A. Finholt E. Jacobson	1952
*NP-5154	Investigations on Aluminum Hydride	G. Evans	4/30/54
*NP-5168	Determination of the Mechanism of the Increase of Viscosity of Organosilicon Compounds at High Temperatures. Quarterly Progress Report No. 27 for December 23, 1953 to March 23, 1954	O. Senn	4/27/54
*NP-5213	Aggregation Reactions of Phosphates in Ansolvous Media	R. Osterheld	1954
*NYO-3442	Analysis of Mixtures of the Condensed Phosphates by Ion-Exchange Chromatography. (Progress Report For) July 1, 1953 to May 1, 1954	S. Lindenbaum T. Peters, Jr. W. Rieman	6/8/54
*NYO-6400	The Diffusion Coefficient of Cesium Chloride in Dilute Aqueous Solution at 25°	H. Harned M. Blander C. Hildreth, Jr.	3/31/54
*ORNL-1688	Sodium Plumbing. A Review of the Unclassified Research and Technology Involving Sodium at the Oak Ridge National Laboratory	W. Cottrell L. Mann	8/14/53
ORNL-1741	The Hydrogen Electrode-Silver Chloride Electrode System at High Temperatures and Pressures	M. Lietzke	7/30/54

ORNL-1744	Apparatus for the Pyrohydrolytic Determination of Fluoride and Other Halides	C. Susano J. White J. Lee, Jr.	8/3/54
*ORO-122	(Investigation of the Mechanism of Allylic Fluorination) Final Report	H. Davis	4/21/54
*PRL-5.7	Fluids, Lubricants, Fuels and Related Materials. Quarterly Progress Report for April, May, and June 1953		9/16/53
*RAE-TRANS-425	Spectrographic Estimation of Deuterium	A. Van Tiggelen	1953
*SO-1100	Utilization of the Gross Fission Products; Progress Report No. 1 for the Period June 1, 1951 to December 31, 1951	R. Dewes E. Goodale	1/10/52
U-25377	Prefoamed Low-Density Unicellular Thermosetting Resin Materials	M. Chakoumakos	10/31/52
*UMN/S35	Investigation of Reactions of Nitrogen Oxides with the Fast-Scanning Infrared Spectrometer. Progress Report	G. Cowan A. Downie D. Rotenberg	1/1/52
*WADC-TR-52-197 (pt. 3)	Synthetic Rubbers from Carbon-Fluoride Compounds	F. Bovey	9/53
*WAL-401/45-33	Chemical Surface Treatment of Titanium. Final Report	H. Pray P. Miller R. Jefferys	10/30/53
*WIS-ONR-6	The Intermolecular Potentials for Some Simple Non-Polar	E. Mason W. Rice	11/6/53
*Y-B4-3	Abstracts of Published Literature on Separation of Hafnium and Zirconium	F. Sachs	1951

*Microcard

ENGINEERING

*NACA-RM-E53K24	Kinetic Study of Mass Transfer by Sodium Hydroxide in Nickel Under Free-Convection Conditions	D. Mosher	12/3/53
*AECD-3527	The Role Played by Eddy Diffusion in Turbulent Flow: Literature Survey	R. Bacon	9/28/51
*AECU-2686	Three-Dimensional Study of a Jet Penetrating a Stream at Right Angles	J. Fraser	1953
*AECU-2852	Pipe Friction Factors for the Turbulent Flow of Lead-Bismuth Eutectic	H. Johnson, et al	2/54
*AECU-2869	Thermal Stresses in Rectangular Strips. (Part) 2	J. Born G. Horvay	1954
*ATI-112063	Experimental Studies of Small Scale Turbulence: Progress Report (For) December 1, 1950 to February 28, 1951	J. Miller, et al	
*ATI-128428	The Effect of Tube Vibrations on Flow Through Tubes	L. Straub E. Silberman	
*CF-51-10-221	Introduction to Nuclear Shielding for Engineers	H. Glen	10/51
*NACA-RM-E52L15a	Preliminary Investigation of Zirconium Boride Ceramals for Gas-Turbine Blade Applications	C. Hoffman	4/10/53
NAA-SR-278	Power Conversion in Nuclear Power Plants	T. Shimazaki C. Robbins	8/15/54
NAA-SR-985	High Temperature Liquid Metal Circulating System	R. Keen	8/1/54
*NACA-TN-3085	An Experimental Study of Porosity Characteristics of Perforated Materials in Normal and Parallel Flow	G. Stokes D. Davis, Jr. T. Sellers	8/4/53

*Microcard

*NDA-10-86	Turbulent Heat Transfer in Polygonal Flow Sections (Supplement to NDA-10-7)	H. Elrod, Jr.	6/30/53
*AF-TR-6685 (Suppl. 2)	Development of High-Temperature Aircraft Hydraulic Fluids	N. Furby	9/53

GEOSCIENCES

*AECU-2663	New Methods for Uranium Exploration and Recovery from Low Grade Ores. Research Progress Report, January 1, 1952 to January 1, 1953		
*AECU-2672	Correlation of Some Pennsylvanian Limestones of the Mid-Continent by Thermoluminescence; Final Report	R. Bergstrom	
*AECU-2828	New Methods for Uranium Exploration and Recovery from Low Grade Ores. Research Progress Report (For) January 1, 1953 to December 31, 1953		
AERE-I/R-1407	Sorting Coal and Shale by Scattering of Gamma-Rays Preliminary Tests	J. Putman E. Solomon	3/11/54
*ATI-117710	Natural Radiocarbon 14 Measurement and Applications; Quarterly Progress Report 4 and 5	J. Kulp	7/15/51
RME-3096 (Pt. 2)	Annual Report for June 30, 1953 to April 1, 1954, Part II	P. Kerr, et al Columbia Univ.	5/54
*RME-4042	Possibilities of Uranium in Pakistan	E. Judd A. Warmington	1953
*RMO-1027	Practical Guides to Uranium Ores on the Colorado Plateau	E. Reinhardt	1952
*TEI-38	Trace Elements Reconnaissance Along Highways in the Tanana and Upper Copper River Valleys, Alaska	H. Wedow, Jr. J. Matzko	1947

*Microcard

METALLURGY & CERAMICS

*AD-21532	The Effect of Grain Size on the Mechanical Properties of Titanium and Its Alloys. Quarterly Progress Report No. 2	F. Holden H. Ogden R. Jaffee	7/1/53
*AEC-TR-1696	Cathodic Sputtering of Alloys	J. Mazur	1953
*AEC-TR-1699	Ultrasonic Testing of Materials in the Light Metal Industry	J. Krauthkramer W. Roth	1953
*AEC-TR-1708	The Electric Spark Sharpening of Cutting Tools with Blades of Hard Alloys	B. Zolothykh	1953
*AEC-TR-1741	Form of Lattice Distortion That May Render a Crystal Plastic	M. Polanyi	1934
*AEC-TR-1747	Theory of Crystal Plasticity	A. Kochendorfer	1938
*AEC-TR-1754	Plasticity and Mosaic Structure of Crystals	A. Kochendorfer	1938
*AECD-2826	The Uranium-Cobalt System	W. Noyce A. Daane	3/1/46
*AECD-2935	A Method for Preparing Large Tungsten-Copper Pieces	H. Hirsch	9/23/46
*AECD-3037	Creep-Rupture Tests on Beryllium	M. Manjoine	1/14/47
*AECD-3334	Electroplating on Zirconium	W. Schickner J. Beach C. Faust	11/15/51
*AECD-3424	Some Special Refractory Materials	F. Norton	9/28/48
*AECD-3461	Investigation of Xeroradiography for Radiographic Inspection with 1000 KV X-Ray and Cobalt 60 Sources	R. Cofield H. Whitehead L. Burkhart	5/5/52
*AECD-3473	Molybdenum Corrosion by Sodium	R. Cygan E. Reed	11/20/51

*Microcard

*AECD-3631	Effect of Cyclotron Irradiation on Creep of Aluminum - Final Report	M. Jeppson R. Mather H. Yockey No. Amer. Aviation, Inc. R. Goranson D. Bancroft, et al	2/12/53
*AECD-3633	Dynamic Determination of the Compressibility of Metals	R. Goranson D. Bancroft, et al	1953
*AECU-19	The Heat Capacity of Beryllium Carbide Powder	J. Trice J. Neely C. Teeter, Jr.	11/10/48
*AECU-20	The Heat Capacity of a Hot Pressed Beryllium Carbide		11/12/48
*AECU-2667	Gas Plated Coatings on Metals and Alloys. Progress Report	Commonwealth Eng. Co. of Ohio	6/10/53
*AECU-2690	On the Use of Radioactive Tracers for Tagging Special Melts of Steel	D. Douglas	1953
*AECU-2722	A Preliminary Investigation on the Radiographic Visualiza- tion of Cracks	J. Dutli G. Tenney	10/14/53
*AECU-2745	Principles of Solution Hardening. Technical Report No. 12	E. Parker T. Hazlett	10/53
*AECU-2776	The Precision Determination of Low Concentrations of Carbon in Metals	L. Pepkowitz	12/53
*AECU-2870	Quantitative Substructure and Tensile Property Investiga- tions of Nickel Alloys	B. Ancker E. Parker T. Hazlett	4/54
*AECU-2880	Soft X-Ray Spectra of Metals and Alloys. Report No. 3 Shapes and Wavelengths of the L-Series Lines of Pure Zir- conium (40) Metal. Annual Report (For) March 16, 1953 - March 15, 1954	N. Spielberg C. Shaw Ohio State Univ.	3/11/54
AERE-C/R-1400	The Analysis of Thorium-Aluminium Alloys	G. Milner J. Woodhead	4/8/54

*Microcard

*AF-TR-5731	The Development of Sheet Materials for High Temperature Applications	J. Meierdirks G. Mohling	11/4/48
*AF-TR-5932	Zirconium Alloys for High Temperature Service	S. Shelton	
*AF-TR-6515	Impregnation of Carbide Skeletal Bodies with Selected Metals or Alloys	E. Montgomery, et al	5/51
*AF-TR-6540	Refractory Bodies Composed of Boron and Titanium Carbides Bonded with Metals	D. Bennett, et al	4/51
*AF-TR-6731 (Pt. 1)	Short-Time Creep Properties of Structural Sheet Materials for Aircraft and Missiles	J. VanEcho, et al	8/52
*AF-TR-6686	Structural Changes of Commercial Titanium and Titanium-Base Alloys on Heat Treatment	W. Rostoker M. Hansen	11/51
*ATI-108739	Hot Pressing of Titanium Carbide	J. Tinklepaugh E. Holman	
BMI-922	Investigation of Wrought Iron-Chromium-Aluminum Alloys for Service at 2200 F	H. Saller J. Stacy N. Eddy	6/28/54
COO-191	The Design of Apparatus for Measuring the Creep of Germanium	R. Pizarro Purdue Univ.	5/54
*DC-52-28-140	Experimental Investigations of Corrosion and Erosion of Liquid Metal Systems: Progress Report for July 15, 1952 - August 15, 1952	A. Dana, Jr. O. Baker	8/15/52
ISC-500	The Zirconium-Columbium Diagram	B. Rogers D. Atkins	6/29/54
KAPL-1147	The Stress-Rupture Strength of Type 347 Stainless Steel Under Cyclic Temperature	E. Baldwin	6/1/54
*MLM-881	The Micrometallurgy of Actinium	J. Stites, Jr. M. Salutsky B. Stone	8/5/53

*MR-558	Determination of Tin In Titanium Alloys	G. Norwitz M. Codell	6/53
*NACA-RM-E53L21	Preliminary Investigation of the "Freeze-Casting" Method For Forming Refractory Powders	W. Maxwell R. Gurnick A. Francisco	12/8/53
*NACA-TN-3207	Role of Nickel Dip in Enameling of Sheet Metal	D. Moore J. Pitts W. Harrison	7/20/54
*NP-5156	A Study of the Weld Heat-Affected Zones in $\frac{1}{2}$ -inch Titanium Alloy Plates. Final Summary Technical Report	E. Nippes J. Gerken B. Schaaf	4/54
*NP-5159	The Electrical Resistivity of Cold-Worked Aluminum Single Crystals. (Period Covered February 1, 1953 to May 1, 1954)	A. Sosin	5/1/54
*NP-5169	Heat Transfer with Sodium-Potassium Liquid Alloys	R. Werner E. King R. Tidball	12/5/49
*NP-5206	Research on Creep Structure Characteristics of Titanium and its Alloys. 1. Creep Deformation Characteristics of Iodide Titanium. 2. Creep Deformation Characteristics of Titanium Alloys. (Period Covered) February 1954 - May 1954	J. Lunsford L. Richardson N. Grant	
*NRL-Memo-230	Thermal and Related Physical Properties of Molten Materials Progress Report No. 7 (For) August 1 to October 31, 1953	D. Williams C. Ewing B. Walker	11/12/53
NYO-3492	Preferred Orientation Effects of Magnetic Fields and Temperature in an Iron Cobalt Alloy	B. Sawyer	7/28/54
*NYO-6320	Application of Chemical Thermodynamics to the Study of Alloy Formation. Progress Report for January 1, 1954 to April 1, 1954	R. Craig, et al	4/9/54

*Microcard

*RAE-TN-MET-111	The Improvement of Ceramics for Use in Heat Engines	F. Bradshaw	10/49
*RAE-TRANS-389	Experiments on the Use of Solution Spectrum Analysis for the Determination of Manganese and Magnesium in Aluminum Alloys	R. Bauer	1951
*RAE-TRANS-390	Theory of the Oxidation of Metals and Metal Alloys	K. Hauffe	1951
*RDB(W)/36	Investigation on the Welding of 1-Inch N. B. 18/13/1 Stainless Steel Pipe by the Hot Pressure Welding Method	C. O'Grady E. Richardson D. Mackey	6/30/52
*S & T Memo- N-2/53	Development of Technique for Metallic Inert ARC Welding Final Report		3/53
*USBM-TPR-4	Zirconium Alloy Investigations; 1 September to 1 November, 1950	S. Shelton	
*WADC-TR-52-54	Malleable Chromium and its Alloys	E. Hayes	3/52
*WADC-TR-52-77	Development of Low Alloy Ti-B Steels for High Temperature Service Applications		4/52
*WADC-TR-52-313 (pt. 2)	Brazing Titanium to Titanium and to Mild and Stainless Steels	W. Lewis, et al	12/53
*WADC-TR-52-335	Titanium Phase Diagrams	H. Kessler W. Rostoker R. Van Thyne	11/53
*WADC-TR-53-91	Investigation of Refractories Suitable for Melting Titanium and Its Alloys	M. Eisenberg J. Stavrolakis	7/53
*WADC-TR-53-145	Exploratory Study of the Metal Bonding of Aluminum Titanate and of Mullite	M. Pausewang	3/53
*WADC-TR-53-162 (pt. 1)	Electrodeposition of Titanium	A. Schlechten M. Straumanis C. Gill	9/53

*Microcard

*WADC-TR-53-177	Titanium Alloys for Elevated Temperature Application	W. Carew, et al	8/53
*WADC-TR-53-190	New High-Temperature Intermetallic Materials	W. Arbiter	5/53
*WADC-TR-53-231	Recrystallization Welding of Aluminum Aircraft Alloys	N. DeCecco J. Parks	12/53
*WADC-TR-53-401	Production of Sound Ductile Joints in Molybdenum	M. Jacobson D. Martin C. Voldrich	1/54
*WAL-401/26-G	Research and Development of Titanium Alloys. Interim Technical Report No. 7 (For) December 1, 1951 - February 29, 1952	W. Gleason R. Pitler	
*WAL-401/48/B-26	Research and Development of Methods of Vapor Deposited Coatings for Titanium and Titanium Alloys. Final Technical Report	A. Styke	12/4/53
*WAL-401/46-29	Electroplating on Titanium. Final Report (For) September 1, 1952 - September 30, 1953	H. Schick	
*WAL-401/49/23	Nitriding and Carbonitriding of Titanium Metal and Its Alloys. Final Technical Report	J. Gitto A. Styka	8/3/53
*WAL-401/68-31	The Effects of Range of Stress and Prestrain on Notched Specimens of Titanium and its Alloys	J. Romauldi E. D'Appolonia	10/53
*WAL-401/84-35	Surface Hardening of Titanium with Metalloid Elements Interim Technical Report (For) June 1, 1953 - November 30, 1953	R. Hanzel V. Pulsifer	
*WAL-401/85-21	Titanium-Rich Ternary Alloys of Titanium with Carbon and Nitrogen, Carbon and Oxygen, and Nitrogen and Oxygen. Summary Report	L. Stone H. Margolin	4/15/53
*WAL-401/88-28	Mechanism of Martensitic Transformation of Titanium Alloys. Summary Technical Report	Y. Liu	11/12/53

*Microcard

*WAL-401/93-32	Investigation of the Mechanical Properties of Titanium Base Alloys		11/30/53
*WAL-401/93-33	Investigation of the Mechanical Properties of Titanium Base Alloys	F. Brotzen E. Harmon A. Troiano	3/31/54
*WAL-401/97-27	The Welding Characteristics of Selected Titanium Alloys. Interim Technical Report	G. Faulkner G. Grable C. Voldrich	7/31/53
*WAL-401/105-25	Grain Size Control in Titanium and the Effect Thereon of Various Addition Agents. Final Report	Y. Liu	11/30/53
*WAL-401/109-8	(Investigation of Machinability of Titanium-Base Alloys). Report No. 8. Tool Life Versus Feed Rate When Shaping Titanium with High-Speed-Steel Tools. (Project M993)	L. Colwell R. McKee	4/53
*WAL-401/109-9	(Investigation of Machinability of Titanium-Base Alloys). Report No. 9. The Cutting Speed for a Given Tool Life Versus Depth of Cut When Shaping Titanium with High-Speed-Steel Tools. (Project M993)	L. Colwell R. McKee	4/53
*WAL-401/109-10	(Investigation of Machinability of Titanium-Base Alloys). Report No. 10. Cutting Forces and Surface Finish When Broaching Titanium with High-Speed-Steel Tools.	L. Colwell R. McKee	5/53
*WAL-401/109-11	(Investigation of Machinability of Titanium-Base Alloys). Progress Report No. 11. An Evaluation of the Bandsawing of Titanium and the Various Alloys. (Project M993).	L. Colwell R. McKee	6/53
*WAL-401/109-12	(Investigation of Machinability of Titanium-Base Alloys). Report No. 12. The Effect of the Cutting Fluid When Turning Titanium. (Project M993)	L. Colwell	8/53
*WAL-401/109-13	(Investigation of Machinability of Titanium-Base Alloys). Report No. 13. A Study of the Tangential and Normal Cutting Forces Produced When Machining Titanium. (Project M993)	L. Colwell	7/53

*WAL-401/109-14	(Investigation of Machinability of Titanium-Base Alloys). Report No. 14. Turning Titanium with Sintered Carbide Tools (Project M993)	L. Colwell	6/53
*WAL-401/109-15	(Investigation of Machinability of Titanium-Base Alloys). Report No. 15. Chip Formation of Titanium. (Project M993)	L. Colwell R. Caddell	7/53
*WAL-401/109-16	(Investigation of Machinability of Titanium-Base Alloys). Report No. 16. Cutting Temperature of Titanium as Compared to Steel. (Project M993)	L. Colwell R. Caddell	7/53
*WAL-401/109-17	(Investigation of Machinability of Titanium-Base Alloys). Report No. 17. Surface Finish of Titanium as Compared with Steel - Shaping and Turning (Project M993)	L. Colwell R. Caddell	6/53
*WAL-401/109-18	(Investigation of Machinability of Titanium-Base Alloys). Report No. 18. Tapping of Titanium and Its Alloys (Project M993)	W. Gilbert	8/53
*WAL-401/109-19	(Investigation of Machinability of Titanium-Base Alloys). Report No. 19. Reaming Titanium 75A, 130B, and 150A With High-Speed-Steel Machine Reamers. (Project M993)	W. Gilbert	5/53
*WAL-401/109-20	(Investigation of Machinability of Titanium-Base Alloys). Report No. 20. Drilling of Titanium and its Alloys. (Project M993)	W. Gilbert P. Visser	7/53
*WAL-401/109-20A	(Investigation of Machinability of Titanium-Base Alloys). Report No. 20A. Work Hardening of Titanium Alloys by Drilling. (Project M993)	W. Gilbert	6/53
*WAL-401/109-21	(Investigation of Machinability of Titanium-Base Alloys). Report No. 21. Deep Hole Drilling of Titanium and its Alloys. (Project M993)	W. Gilbert P. Visser	7/53
*WAL-401/109-22	(Investigation of Machinability of Titanium-Base Alloys). Report No. 22. Tapping Titanium; Varying Tap Design, Cutting Fluid, Cutting Speed, and Thread Depth. (Project M993)	W. Gilbert	8/53

*Microcard

*WAL-401/109-23A (Investigation of Machinability of Titanium-Base Alloys). Report No. 23A. Face Milling Titanium; Comparison with Previous Tests. (Project M993)	W. Gilbert C. Good	7/53
*WAL-401/109-23B (Investigation of Machinability of Titanium-Base Alloys). Progress Report No. 23B. Face Milling Titanium; Effect of Position of Cutter and Work. (Project M993)	W. Gilbert C. Good	7/53
*WAL-401/109-23C (Investigation of Machinability of Titanium-Base Alloys). Report No. 23C. Face Milling Titanium; Effect of Feed, Relief, Side-Rake, and Side-Cutting-Edge Angle on Tool Life. (Project M993)	W. Gilbert C. Good	7/53
*WAL-401/109-23D (Investigation of Machinability of Titanium-Base Alloys). Report No. 23D. Face Milling Titanium; Tool-Life Tests on Titanium Alloys. (Project M993)	W. Gilbert C. Good	7/53
*WAL-401/109-23E (Investigation of Machinability of Titanium-Base Alloys). Progress Report No. 23E. Power Required to Face Mill Titanium (Project M993)	W. Gilbert	7/53
*WAL-401/109-24 (Investigation of Machinability of Titanium-Base Alloys). Report No. 24. Cutting Forces and Surface Finish When Broaching Holes in Titanium with High-Speed-Steel Tools. (Project M993)	R. McKee W. Gilbert	5/53
*WAL-401/109-25 (Investigation of Machinability of Titanium-Base Alloys). Report No. 25. Mechanical Properties of Machinability Program Work Materials. (Supplement to Report No. 2) (Project M993)	L. Colwell W. Truckenmiller	6/53
*WAL-401/109-26 (Investigation of Machinability of Titanium-Base Alloys). Report No. 26. The Effect of Side-Rake Angle and Size of Cut When Turning Titanium Grades Ti-75A and RC-130A with High-Speed-Steel Tools. (Supplement to Reports No. 3 and 4) (Project M993)	L. Colwell	8/53

*WAL-401/109-27	(Investigation of Machinability of Titanium-Base Alloys). Report No. 27. A Supplemental Report on Shaping Titanium RC-130A and the Effect of Feed Rate and Depth of Cut on the Relationship of Speed to Tool Life. (Project M993).	R. McKee W. Gilbert	6/53
*WAL-401/109-28	(Investigation of Machinability of Titanium-Base Alloys). Report No. 28. Cutting Forces and Surface Finish When Broaching Titanium with High-Speed-Steel Tools. (Supplement to Report No. 10). (Project M993)	R. McKee W. Gilbert	5/53
*WAL-401/147-18	Beta Plasticity in Titanium-Base Alloys. Interim Tech- nical Report No. 2 (For July 31 to October 31, 1953)	P. Albert I. Cadoff	12/15/53
*WAL-401/149-11A	Diffusion of Hydrogen, Nitrogen, and Oxygen in Titanium Summary Report		7/13/53
*WAL-401/155-7	Effect of Atmospheric Contaminants on Arc Welds in Titanium Interim Technical Report Covering Period January 1 to June 30, 1953	J. Barrett I. Lane, Jr.	
*WAL-401/172-6	Visual Study of the Machining of Titanium	N. Cook	11/53
*WAL-691.1/30-38	Chromium Electroplating. Final Technical Report	A. Burr, et al	1950

PHYSICS

*AD-8604	First Quarterly Engineering Report on Feasibility Study of Transistor Airborne Digital Computer (Tradic)	Bell Tel. Labs.	2/15/53
*AD-11130	Nuclear Batteries. Quarterly Progress Report No. 3 (For) January 15, 1953 - April 15, 1953	J. Coleman	1953
*AD-14239	Investigations on Utilization of Radioactive Energy as A Source of Battery Power. Third Quarterly Progress Report (For) February 1, 1953 to April 30, 1953	A. Thomas V. Ragsone	1953

*Microcard

*ADL-103	Some Instrumentation Problems at Hanford	C. Gammertsfelder	
*ADP-26	Optical Method of Determining Thickness of Geiger Tube Windows	F. Brown, III A. Willoughby	4/19/48
*AEC-TR-1548	On the Theory of Spin	V. Ginzburg I. Tamm	1952
*AEC-TR-1698	Analysis with High Frequency Fields	W. Van Tongeren	1951
*AEC-TR-1710	Dioptric of Electron-Optical Apparatus With Arbitrary Curved Diagram Axes	G. Wendt	1942
*AEC-TR-1712	Some Observations on the Operation of an Ion Source of the Nier Type of a Mass Spectrometer	M. Todorovic	1952
*AEC-TR-1713	A Method for the Measurement of the Abundance of Isotopes with a Mass Spectrometer in the Presence of Residual Peaks	M. Todorovic	1952
*AEC-TR-1730	Unsolved Problems in the Theory of Semiconductors	A. Ioffe	1951
*AEC-TR-1929	The First Excited State in Nuclei with Even Numbers of Protons and Neutrons	P. Staehelin P. Preiswerk	9/53
*AECD-2746	Optical Properties of Three Uranium Phosphates	W. Harris R. Scott	9/30/49
*AECD-2948	Frequency Modulation System	V. O'Gorman	
*AECD-2949	Gravity Waves in Water Caused by Explosions	W. Penney	
*AECD-3157	Comparison of Data on the Scattering Cross Sections of Carbon and Hydrogen	G. Chew	3/14/44
*AECD-3225	100-Ton Test; Measurement of the Velocity of Sound	H. Barschall G. Martin	6/15/45
*AECD-3331	The Preparation of Thin and of Thick Targets to be Bombarded by Positive Particles	R. Bolomey	1/9/52

*Microcard

*AECD-3239	Gamma-Ray Transmission Through Finite Slabs; Part I	G. Peebles	7/23/51
*AECD-3252	Some Tests of the Diffraction of Blast Waves	M. Merritt	7/7/51
*AECD-3355	Boundary Disturbances in High Explosive Shock Tubes	R. Shreffler	3/31/52
*AECD-3357	Report on the Investigation of Betatron Radiographic Techniques	C. Smith	4/30/51
*AECD-3364	Fast Jets From Collapsing Cylinders	F. Willig F. Lucy R. Shreffler	1/18/52
*AECD-3366	Thermodynamic Properties of Air	W. Baker	4/23/52
*AECD-3379	Energy Distributions of Fragments from the Fission of U^{235} , U^{238} , and Pu^{239} by Fast Neutrons (thesis)	J. Wahl	4/29/52
*AECD-3385	The Neutron Spectrum of a Radium-Beryllium Photo Source; Excerpt from ANL-4476	C. Effler	7/5/50
*AECD-3398	A Theoretical Equation of State for Detonation Products of Solid Explosives. I. A Free Volume Equation of State for Mixtures	Z. Salzburg	9/4/51
*AECD-3399	The Half-Life of Am^{242m} for Negative Beta-Particle Emission	T. Keenan R. Penneman B. McInteer	4/23/52
*AECD-3408	The Slowing Down Distribution to Indium Resonance of Fission Neutrons from a Point Fission Source in Two Mixtures of Aluminum and Light Water, 1:1 and 1:2 by Volume	L. Roberts T. Fitch	2/23/49
*AECD-3409	Proposed Experiment to Determine the Energy-Ionization Relation for Fission Fragments	H. Schmitt R. Leachman	4/28/52
*AECD-3439	Concerning the Possible Occurrence of Si^{32} in Nature	A. Turkevich A. Tompkins	6/51

*Microcard

*AECD-3547	The Energy Distribution of Slowed Fission Fragments	J. Northrop J. Brolley, Jr.	9/8/53
*AECD-3558	Separation of a Shock Wave Into Elastic and Plastic Waves, and Measurement of the Pressure of the Elastic Wave. (with Addendum)	S. Minshall	6/17/53
*AECD-3595	Multigroup Methods for Neutron Diffusion Problems	H. Hurwitz, Jr. R. Ehrlich	9/10/53
*AECD-3597	Nuclear Charge Distribution in U ²³⁵ 14 Mev Neutron Fission	G. Ford	1953
*AECD-3598	Total Neutron Cross Section for Uranium from 20 Kev to 20 Mev	R. Henkel, et al	1953
*AECD-3604	6.70 ev Resonance in U ²³⁸	J. Levin	11/9/53
*AECD-3605	Interpretations of the Velocity Distributions of Slowed Fission Fragments	H. Schmitt R. Leachman	1953
*AECD-3611	Metal Equation of State From Shock Wave Studies	J. Walsh	1953
*AECD-3612	Precision Measurement of Detonation and Strong Shock Velocity in Gases	H. Knight R. Duff	1/8/54
*AECD-3613	X-Ray Scattering By Lattice Defects in Neutron Irradiated Single Crystals of Boron Carbide	C. Tucker, Jr. P. Senio	1954
*AECD-3614	Shock Hugoniot of Gases	W. Deal, Jr.	
*AECD-3620	Applications of High Explosives and High Speed Photography To Physical Research Experiments	F. Willig	
*AECD-3621	Fast Jet Actuated Shock Tubes	F. Willig	1952
*AECD-3622	The Hugoniot of Gases by Shock Wave Measurements	R. Christian R. Shreffler	1953

*Microcard

*AECD-3626	The Structure of a Steady-State Plane Detonation Wave with Finite Reaction Rate	J. Kirkwood W. Wood	1953
*AECD-3628	Ionization Measurements -- Experimental Method	H. Schmitt	1953
*AECD-3630	Velocity Distributions of Slowed Fission Fragments	H. Schmitt R. Leachman	1953
*AECD-3402	Relative Cross Sections for Photo Fission and Photo Neutron Emission	R. Duffield J. Huizenga	5/20/52
*AECU-16	Predetermined Electronic Counter	B. Gossick	6/21/48
*AECU-28	Reduction of Microphonics in the Parallel Plate Alpha Chamber (An Interim Report)	C. Hemler	7/20/48
*AECU-29	Tetrode Characteristics of Raytheon Tube CK571AX	T. Cantwell J. Sandock	8/28/48
*AECU-40	On the Interpretation of Inelastic Scattering Data	B. Feld	7/29/48
*AECU-47	Monte Carlo Calculations for Shields	W. DeMarcus M. Nelson	12/30/48
*AECU-49	A Method of Preparing Anthracene Crystals Suitable for Scintillation Counters	J. Alley	10/11/48
*AECU-52	Note on the Arc Spectrum of Element 61	C. Feldman	1948
*AECU-96	Most Efficient Designs for Linear Experiments	N. Heerema C. Daniel	7/29/47
*AECU-120(rev)	Berkeley Proton Linear Accelerator	L. Alvarez H. Bradner, et al	10/3/53
*AECU-128	Instructions for use of A1 Amplifier and Preamplifier	W. Jordan P. Bell	2/15/49

*Microcard

*AECU-162	Estimation of P ³² By Measurement of Brehmstrahlen in an Ionization Chamber	P. Tompkins	3/17/49
*AECU-163	Thresholds for the Photo-Disintegration of Zr ⁹⁰ , Pr ¹⁴¹ , As ⁷⁵ , I ¹²⁷ , Ni ⁵⁸ , and La ¹³⁸	W. Ogle	2/16/49
*AECU-2664	Production of Lattice Defects in Germanium By Electron Bombardment	E. Klontz	6/52
*AECU-2670	The Electron-Positron Spectrum of Zn ⁶⁵ above 5 Kev	J. Perkins S. Haynes	6/24/53
*AECU-2678	Final Status Report. I. On the Positive Excess of Cosmic Ray μ -Mesons. II. Radiative Bohr Orbit Transitions of Stopped Negative μ -Mesons. III. Future Research. App. A and B.	H. Morewitz M. Shamos A. Fafarman	5/31/53
*AECU-2685	Radioactive Charging Through Solid Dielectrics	P. Feng J. Kennedy	1953
*AECU-2691	Electronic Devices for Nuclear Physics. Quarterly Report (For) April 1953 - July 1953	G. Morton, et al	
*AECU-2696	Transformation of Scattering Cross Sections and Applications to The Boltzmann Equation	H. Hurwitz, Jr. P. Zweifel	1953
*AECU-2702	The Stopping Powers of Various Elements for Protons of Energies from 400 to 1050 Kev	A. Chilton J. Cooper J. Harris	1953
*AECU-2704	A Note on the Derivation of the Coriolis Acceleration	R. Frank	
*AECU-2709	(Utilization of Fission Products) An Analysis of the Radiation Fields Around Two Gamma Radiation Sources	J. Lewis, et al	1953
*AECU-2769	Yale Linear Electron Accelerator. Status Report (For) March 1953	H. Schultz	3/31/53

*Microcard

*AECU-2770	Yale Linear Electron Accelerator. Status Report (For) April 1953	H. Schultz W. Wadey	4/30/53
*AECU-2733	Elastic Scattering of Protons by Deuterons at High Energy	J. Gammel	1953
*AECU-2734	The Long-Lived Phosphorescent Components of Thallium-Activated Sodium Iodide	C. Emigh L. Megill	5/25/53
*AECU-2735	Po α Ranges in Various Counting Mixtures	G. Poicourt J. Brolley, Jr.	1953
*AECU-2740	Progress Report No. 30 (For) May 31, 1953 to August 31, 1953		8/31/53
*AECU-2754	Magnetic Interactions on the Basis of a Modified Shell Model of Complex Nuclei (thesis)	A. Volkov	1953
*AECU-2758	Charged Particles from the Interaction of 14-Mev Neutrons with Li ⁶ and Li ⁷	G. Frye, Jr.	1953
*AECU-2762	On the Spectrum of An Unsymmetric Operator Arising in the Transport Theory of Neutrons	J. Lehner G. Wing	1953
*AECU-2766	Fundamental Research in Spectroscopy of Short Wave-Length X-Rays and Gamma-Rays. Quarterly Report (For) Period January 1, to March 31, 1953	J. DuMond	
*AECU-2767	Fundamental Research in Spectroscopy of Short Wave-Length X-Rays and Gamma-Rays. Quarterly Report (For) Period April 1 - June 30, 1953	J. DuMond	
*AECU-2771	Yale Linear Electron Accelerator. Status Report (For) May 1953	H. Schultz W. Wadey	5/31/53
*AECU-2773	Proof of Validity on Monte Carlo Method For Canonical Averaging	M. Rosenbluth	1953

*Microcard

*AECU-2784	Observation of Taylor Instability in Gases	R. Duff H. Knight	1954
*AECU-2785	Statistical Uncertainties in the Radiographic Determination of Gas Densities	D. Venable L. Perry	12/53
*AECU-2789	Large-Volume Liquid Scintillators and Their Applications	C. Cowan F. Harrison F. Reines	1953
*AECU-2792	Positive Ion Counting For Mass Spectrometer Beam Currents of 10^{-14} to 10^{-19} Ampere	F. White T. Collins	10/30/53
*AECU-2795	Electronic Devices for Nuclear Physics. Quarterly Report No. 13 (For) July 1953 - October 1953	G. Morton, et al	12/28/53
*AECU-2803	Appearance Potential Studies. 1. Determination of Excess Kinetic Energy	R. Kandel	1953
*AECU-2810	Progress Report No. 31 (For) September 1, 1953 to November 30, 1953	Lab. for Nuclear Sci. MIT	11/30/53
*AECU-2812	The Slow Component in the Decay of Fluors	F. Harrison	1953
*AECU-2830	Non-Reactor Electronics at Los Alamos	R. Watts	1953
*AECU-2845	Pion-Hydrogen Phase Shift Analysis Between 120 and 217 Mev	F. deHoffman, et al	2/22/54
*AECU-2847	The University of Michigan Cyclotron. Annual Report (Project M879-1)	H. Crane P. Hough	3/31/53
*AECU-2850	The University of Washington Sixty-Inch Cyclotron	F. Schmidt, et al	1952
*AECU-2854	Los Alamos Coding System and Assembly Program for the IBM 701. Part 1.	D. Sweeney	1953
	Los Alamos Debugging Programs and Techniques as used on the IBM 701. Part 2	E. Voorhees, Jr.	

*Microcard

*AECU-2855	The Transmission of Slow Neutrons by Liquid Helium. 1. Experimental	H. Sommers, Jr. J. Dash L. Goldstein	1953
*AECU-2856	A Self-Balancing System for Continuous Control of Current or Voltage	F. Dunn J. Mann J. Mosley	1953
*AECU-2857	The Monte Carlo Method Applied to a Problem in γ -Ray Diffusion	B. Carlson	1953
*AECU-2862	A Necessary and Sufficient Condition for Uniform Convergence on a Compact Space	J. Holladay A. Sobczyk	1953
*AECU-2863	An Analog Computer for the Solution of Sixteen Nonlinear Equations in Four Independent Variables	W. Briscoe	4/8/54
*AECU-2864	Thermal Neutron Capture Cross Sections of Hydrogen, Boron, and Silver	F. Scott D. Thomson W. Wright	1953
*AECU-2866	The Production of Nb ^{93m} by the Pile Neutron Irradiation of Niobium	R. Schuman	1953
*AECU-2868	The Spectroscopy of Nuclear Gamma-Rays by Direct Crystal Diffraction Methods	J. DuMond	3/54
*AECU-2874	Electron Impact Broadening of Spectral Lines (thesis)	B. Kivel	1954
*AECU-2684	Quarterly Progress Report, April 1 - June 30, 1953	Oak Ridge Inst. of Nuclear Studies	1953
AERE/GP/M-146	A Method of Simultaneously Focusing and Accelerating a Beam of Protons	J. Adlam	1/53
AERE-M/R-1401	Changes in Some Physical Properties of Polyethylene by Pile Irradiation at 80° C	M. Ross Atomic Energy Res. Estab. Harwell, Berks. England	4/2/54

*Microcard

AERE-M/R-1437	The Optical Properties of Thin Oxide Films on Tantalum	J. Polling A. Charlesby	5/13/54
AERE-T/M-62	Scattering by Focusing-Foils in a Proton Linear Accelerator	J. Bell	4/52
AERE-T/M-103	Proton Orbits for an Electrostatically Strong Focused 0.5 to 5 Mev. Linear Accelerator: 600 Mev. Proton Linear Accelerator	R. Ridley	3/54
AERE-T/M-104	Shunt Impedance Calculations for Proton Linear Accelerators - Part I	W. Walkinshaw C. Sabel S. Outram	3/54
AERE-T/M-105	Shunt Impedance Calculations for Proton Linear Accelerators - Part II	W. Walkinshaw C. Sabel S. Outram	3/54
*AF-TR-6581	A New Linear Operational Calculus	F. Bubb	5/51
*AF-TR-6675	Ultrasonics Applied to Solidification and Solid-State Transformation	J. Jones	10/51
*AMRL-114	Further Investigations into the Modification of Radiation Sensitivity Afforded by Cobalt	W. Parr T. O'Neill, et al	4/10/53
ANL-5263	Capture Cross Section of Ac ²²⁷ for Thermal Pile Neutrons	R. Sjoblom P. F. Fields	5/54
*ATI-132082	Scintillation Counters	A. Vaisenberg	1953
BNL-237(T-37)	Gray Wedge Pulse Height Analysis. II.	A. Schardt	1/54
CERN-PS/AC-5	On a Possible Ejection Scheme		6/7/54
CERN-PS/JBA-MGNH/22	The Variation of the Parameters of a 25 Gev Alternating Gradient Synchrotron with u and n		7/1/54
*COO-199	Progress Report No. 5 (On Radiation Damage and Recovery in Cu, Ag, Au, Ni, and Ta)	J. Koehler Illinois Univ.	3/1/54

*Microcard

*CU-1-54-Nonr- 266(11)-Ch.E.	The Measurement of the Thermal Conductivity of Gases at High Temperature. Analysis of an Alternating Plus Direct Current Hot Wire Method Which Avoids Radiation Error. Progress Report	C. Bonilla B. Tarmy C. Lee	1/20/54
*CU-1-54-SC- 42519-Phys.	Quarterly Progress Report (No. 5)		1/30/54
*CU-3-53-SC- 42519-Phys.	Quarterly Progress Report No. 3 (For July-August 1953)		8/31/53
*CU-4-53-SC- 42519-Phys.	Quarterly Progress Report No. 4		10/30/52
DP-45	The SRP Standard Windowless Flow Counter	C. Prohaska	4/54
DP-61	The SRP Standard Geiger-Mueller Counter	C. Prohaska	5/54
DP-63	A Remote-Indicating BF ₃ Counter System	L. Cathey	6/54
HW-29349	Operation and Maintenance Instructions for Gamma Scintillation Monitor - Model III	R. Connally Hanford Atomic Prod. Operation	10/1/53
IDO-16129	Routine Measurement of Gamma Intensity	C. Hogg Phillips Petrol. Co.	11/2/53
ISC-443	The Half-Lives of Some Short Lived Low Z Nuclei Formed by Photonuclear Reactions	P. Phipps D. Zaffarano	12/53
ISC-482	A New Electronic Vacuum Dilatometer	M. Dooley D. Atkins	6/17/54
ISC-487	Physics Quarterly Summary Research Report. January February and March 1954	Ames. Lab.	7/28/54

*Microcard

KAPL-1146	Electron Irradiation of Silicon p-n Junctions	J. Moyer	5/21/54
LA-1676	Automatic Aligning Light, Shutter, and Plate Racking Controls for the Bausch and Lomb Large Littrow Spectrograph	J. Gillette	7/29/54
MONOGRAPH-2136	Measurement of Noise with the Sound Spectrograph and Parameter Relationships in the Portrayal of Signals with Sound Spectrograph Techniques	G. Peterson G. Raisbeck	12/53
MONOGRAPH-2219	Orientation Relationships in Cast Germanium	W. Ellis J. Fageant	2/54
MONOGRAPH-2223	Characteristics of Ultrasonic Delay Lines Using Quartz and Barium Titanate Ceramic Transducers	J. May	5/54
MONOGRAPH-2234	A Point-Contact Transistor VHF FM Transmitter	D. Thomas	4/54
MONOGRAPH-2259	Measurement of Random Monochrome Video Interference	J. Barstow H. Christopher	1/54
MONOGRAPH-2255	Search for the Hall Effect in a Superconductor I. Experiment	H. Lewis	12/1/53
MONOGRAPH-2256	Instrumentation and Experimental Procedure for Studies of Electron Ejection by Ions and Ionization by Electron Impact	H. Hagstrum	12/53
MONOGRAPH-2260	RC Active Filters	J. Linvill	3/54
MONOGRAPH-2261	Resistivity Measurements on Germanium for Transistors	L. Valdes	2/54
MONOGRAPH-2262	Theory of Plasma Waves in Metals	P. Wolff	10/1/53
MONOGRAPH-2263	Transistor Reliability Studies	R. Ryder W. Sittner	2/54
MONOGRAPH-2265	Shot Dependence of p-n Junction Phototransistor Noise	A. Slocum J. Shive	3/54
MONOGRAPH-2266	Low-Temperature Internal Friction and Elasticity Effects in Vitreous Silica	M. Fine H. Van Duyne N. Kenney	3/54

MONOGRAPH-2267	Focusing of an Electron Beam by Periodic Fields	A. Clogston H. Heffner	4/54
MONOGRAPH-2270	Diffusivity and Solubility of Copper in Germanium	C. Fuller, et al J. Struthers	3/15/54
MONOGRAPH-2278	Diffraction of Plane Radio Waves by a Parabolic Cylinder	S. Rice	3/54
MTF-L-54-53	Hafnium and Zirconium Total Cross-Section Measurements	E. Joki J. Evans Phillips Petrol. Co.	6/23/54
*NACA-TN-3210	The Role of Triple Collisions in Excitation of Molecular Vibrations in Nitrous Oxide	R. Walker T. Rossing S. Legvold	5/26/53
NBS-3299	High-Range Accelerometer Calibrations	T. Perls C. Kissinger	6/54
*NP-1827	Radiac Detector DT-51 ()/UD Dosimeter Reader and Comparison Scale; First Quarterly Report No. 3 covering Period Ending 15 October 1950	J. Cook S. Siegel Armour Resr. Foundation	10/30/50
NP-2234	A New Type of High Frequency Discharge in Vacuum and its Use as an Ion Source; trans. from <u>Arkiv Mat., Astron. Fysik. 31A</u> , No. 18, 1-17 (1944)	H. Alfven H. Cohn-Peters	1944
*NP-5128	Relativistic Ion Optics of a Cylindrical Electrostatic Analyzer	V. Honnold W. Miller	11/53
*NP-5129	Photodisintegration Thresholds of Deuterium and Beryllium	J. Noyes, et al J. VanHoomissen	11/53
*NP-5152	Self-Energy Effects on Meson-Nucleon Scattering According to the Tamm-Dancoff Method	W. Visscher	1953
*NP-5150	Shape of Collision-Broadened Spectral Lines	E. Gross	4/54

*Microcard

*NP-5171	Study of Rectifying Contacts Between Semi-Conductors. Quarterly Progress Report (For) December 31, 1953 to March 31, 1954	D. Detwiler Franklin Inst.	
*NP-5200	Study of Pneumatic Elements for Radiation Detectors Final Report	J. Trimmer Tennessee Univ.	5/1/54
*NP-5218	Radiation Damage Study. Effects of Ionizing Radiation on Certain Materials. Final Summarizing Report	Sarah Mellon Scaife Rad. Lab. - Pittsburgh U.	3/54
*NYO-6379	New Isotopes of Niobium: Nb ⁸⁹ and Nb ^{89m}	R. Diamond	3/30/54
NYO-6571	Total Cross Sections of Negative and Positive Pions in Hydrogen and Deuterium ^x	J. Ashkin, et al J. Blaser	6/21/54
NYO-6572	Possible Triple Scattering Experiments	L. Wolfenstein	7/2/54
*NYO-6576	Pairing Effects in Coulomb Energies and the Radii of Mirror Nuclei	B. Carlson I. Talmi	6/17/54
ONRL-54-54	Research in Cosmic Rays and Nuclear Physics in Central and Southern Italy	J. Richardson	7/2/54
*P-404(RAND)	The Incomplete Approximator (In Six Fits)	C. Hastings, Jr. J. Wong, Jr.	6/12/53
*PDB-68	The Design of a Chamber Suitable for Arcing Various Materials in Air-Free Atmospheres	G. Zotov	12/4/52
*PIB-132.12	Development of R. F. Power Meters for the Frequency Band 8,200 - 40,000 MC/SEC. Quarterly Progress Report for the Period July 1, 1951 to September 30, 1951	H. Carlin A. James Polytechnic Inst. of Brooklyn	10/23/51
*RAE-LIB-BIB-93	Selected List of Published References to Transistors and Semiconductors	R. Forrest	6/53
*RM-1202(RAND)	Hydrogen Wave Functions	R. Latter	8/54

*Microcard

*RPR-122	Automatic Computation. Part 3. Programmes for the Mk. 1 Computer: Part 1	T. Pearcey	8/53
*JUT-6	A Method of Calibrating Radiac Instruments. (Dugway Project)	E. Campagna	12/21/53
*WIS-ONR-5	An Approximate Theory of Inelastic Collisions	J. Hornig J. Hirschfelder	10/9/53

REACTOR SCIENCE

*AECD-2638	Pile Theory Notes for M.I.T. Seminar, Part II	F. Friedman B. Feld	
*AECD-2945	The Bare Intermediate Reactor: The Approach to Critical	N. Smith	4/18/50
*AECD-3415	The Argonne Heavy Water Reactor (CP-3 Prime)	W. Zinn	8/10/51
*AECU-1952	Status Report: Elastomeric Materials as Shielding Compounds for Nuclear Reactors	W. Davidson B. F. Goodrich Co.	4/1/52
AEP-99	A Study of Favorable Design Values for a Reactor Operated for Power Generation Only	E. Mabuze K. Hub	9/30/53
IDO-16041	Modification of Reactor Instruments Compensated Ion Chamber Power Supply	K. McCollom	12/10/52

MISCELLANY

MISC-1954-29 No. 63	Translated Contents Lists of Russian Periodicals No. 63	Dept. of Sci. and Ind. Res. London	6/54
MISC-1954-30 No. 3	Nuclear Notes for Industry Number 3	USAEC	
MISC-1954-46 Vol. 14 No. 6	National Defense Review	Army Library	6/54
MLM-805	An Instrument for the Measurement of the Time of Fall of A Plummet in a Pressure Vessel (Final Report)	A. Rogers, et al	2/27/52

*Microcard

NACA-Abstract #66 Current NACA Reports

6/13/54

NACA-Abstract #67 Current NACA Reports

7/28/54

TID-4500 Distribution Lists for NonClassified Reports
(8th ed.)

7/15/54

LIST OF REPORTS ISSUED BY INFORMATION DIVISION, UCRL

UCRL-2591 Rev. Chemical Properties of Elements 99 and 100

S. Thompson
B. Harvey
C. Choppin
G. Seaborg

7/23/54

UCRL-2603 The Effect of Pretreatment with Propyl Thiouracil on the Accumulation of Astatine-211 by the Thyroid Gland of the Rat

P. Durbin
J. Hamilton
M. Parrott

5/24/54

UCRL-2605 Medical and Health Physics Quarterly Report

5/16/54

UCRL-2612 Photoperiodism and Photosynthetic CO₂ Assimilation

L. Norris
M. Calvin

6/54

UCRL-2620 A 90-Inch Cyclotron with an Adjustable-Energy External Beam

B. Smith

6/9/54

UCRL-2658 Documents Issued by the Technical Information Division January 1 through June 30, 1954

7/23/54

UCRL-2664 List of Unclassified Reports Received and Issued in the UCRL Information Division During the Period of July 16-31, 1954

8/3/54

UCRL-2565 A Survey of the Rates and Products of Short-Term Photosynthesis in Plants of 9 Phyla

L. Norris
R. Norris
M. Calvin

5/54