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Berkeley, California

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LIST OF UNCLASSIFIED REPORTS RECEIVED AND ISSUED BY THE UCRL  
INFORMATION DIVISION DURING THE PERIOD OF FEBRUARY 16-29, 1956

March 5, 1956

Printed for the U. S. Atomic Energy Commission

LIST OF CODES FOR REPORT NUMBERS

ACCO	-American Cyanimid Company
AEP	-Monsanto Chemical Company
AERE	-Gt. Brit. Atomic Energy Research Establishment, Harwell, Berks. England
ALCO	-American Locomotive Company
AMF	-American Machine & Foundry Co.
ANL	-Argonne National Laboratory
ANP	-Aircraft Nuclear Propulsion Project
APEX	-General Electric Company, ANP Project
ASTIA	-Armed Services Technical Information Agency, Dayton, Ohio
BAW	-Babcock & Wilcox
BDX	-Bendix Aviation Corp., Detroit
BMI	-Battelle Memorial Institute
BNL	-Brookhaven National Lab.
BRB	-Bridgeport Brass Company
BSC	-Bethlehem Steel Company
CENP	-Combustion Engineering, Inc.
CERN	-European Organization of Nuclear Research, Geneva
COO	-Chicago Operations Office
CU	-Columbia University
DCDE	-Atomic Power Development Associates
DLWK	-Duquense Light Co-Walter Kidde
DOW	-Dow Chemical Company
DP	-E.I. duPont de Nemour & Co.
FWE	-Foreign Weapons Effects
GAT	-Goodyear Atomic Corporation
GEAP	-General Electric Company
GEL	-General Electric Co., General Engineering Laboratory
HEC	-Hooker Electrochemical Co.
HO	-Hanford Operations Office
HW	-Hanford Works, Richland
IDO	-Idaho Operations Office
ISC	-Iowa State College
K	-Carbide and Carbon Chemicals Co. (K-25 Plant)
KAPL	-Knolls Atomic Power Laboratory
KLX	-The Vitro Corporation of America
KLXS	-Vitro Corporation of America (Study Group)
KY	-Carbide and Carbon Chemicals Co. (C-31 Plant)
LA&LAMS	-Los Alamos Scientific Lab.
MCW	-Mallinckrodt Chemical Works
MIT	-Massachusetts Inst. of Tech.
MLM	-Mound Laboratory
NAA-SR	-North American Aviation, Inc.
NBL	-New Brunswick Laboratory
NBS	-National Bureau of Standards
NEA	-Foster Wheeler-Pioneer Service
NLCO	-National Lead Company of Ohio
NMI	-Nuclear Metals Inc.
NNSD	-Newport News Shipbuilding and Dry Dock Co.
NPG	-Commonwealth Edison Co. (Nuclear Power Group)
NRL	-Naval Research Laboratory, Washington D.C.
NYO	-New York Operations Office
ORINS	-Oak Ridge Institute of Nuclear Studies

ORNL	-Carbide & Carbon Chemicals Co. (ORNL)
ORO	-Oak Ridge Operations Office
PWAC	-Pratt & Whitney Aircraft Division of the United Aircraft Corp.
RFP	-Rocky Flats Plant
RME	-Grand Junction Operations Office
RMO	-Division of Raw Materials
SAN	-San Francisco Operations Office
SC	-Sandia Corporation
SEP	-Sylvania Electric Products, Inc.
SFO	-Santa Fe Operations Office
SRO	-Savannah River Operations Office
SO	-Schenectady Operations Office
TEI(M)	-U. S. Geological Survey Trace Elements Reports
TID	-Technical Information Service
TVA	-Tennessee Valley Authority
UCLA	-University of California Medical Research Laboratory
UCRL	-University of California Radiation Laboratory
UR	-University of Rochester
USNRDL	-U.S. Naval Radiological Lab., San Francisco, Calif.
UWFL	-University of Washington Applied Fisheries Laboratory
WAPD	-Westinghouse Electric Corp., Bettis Plant
WASH	-AEC, Washington
WEC	-Westinghouse Electric Company Industrial Atomic Power Group
WIN	-National Lead Co., Inc. Winchester
WT	-Weapon Test Reports
Y	-Carbide and Carbon Chemicals Company (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 received 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 the 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 BY THE UCRL  
INFORMATION DIVISION DURING THE PERIOD OF FEBRUARY 16-29, 1956

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

March 5, 1956

<u>Index Number</u>	<u>Title</u>	<u>Author</u>	<u>Date</u>
<u>BIOSCIENCES</u>			
AECU-3101	The Absorption and Distribution of Radiostrontium (Sr <sup>89</sup> ) and Radium (Ra <sup>226</sup> ) in Certain Vegetable Crops (Thesis)	C.G. Johns Michigan State Univ.	9-55
HW-34499	Adsorption and Retention of Strontium by Soils of the Hanford Project	J.R. McHenry	2-1-55
HW-40460	Automation in the Beta Monitoring of Liquid Waste Streams	H.G. Rieck, Jr. J.D. McCormack	12-15-55
MISC 1956-56	Final Report on Contract N6ori-212, Task Order I. Project 051,028 on the Photochemical Properties of Chlorophyll.	Minnesota Univ.	1955
NBS-4526	Calibration of Tissue Equivalent Radiation Detector Model 1 Manufactured by Radiation Industries Company Brookhaven, N.Y.	R.S. Caswell B. Brown F.H. Day	2-6-56
PR-B-27	Progress Report for July 1, to September 30, 1955; Biology Branch	Chalk River Project, Canada	
UR-417	Beryllium Sensitization in Pigs	R.D. Armstrong L.J. Leach W.L. Downs, et al. Rochester, Univ.	2-14-56



A.E.R.E. C/R 1764	A Device for Giving Cross Motion on a Hilger (L.76) Measuring Microscope	L.F.H.Bovey A.V.Slatte	9-30-55
A.E.R.E. C/R 1780	The Determination of Zirconium in Fluoride-Containing Solutions	G.W.C.Milner G.A.Barnett	11-28-55
A.E.R.E. C/R 1794	Thermodynamic Data on Concentrated Sulphuric Acid Solutions	E.Glueckauf F.P.Kitt	11-8-55
AERE-C/R-1804 (AERE-C/R-298(Rev.))	The Fumeless Dissolving of Uranium	G.L.Miles	1-49
AERE-Lib/Trans-549	The Liminescence of Uranyl Glasses and Crystals, by A.N.Sevchenko. Trans. from Akademia Nauk, SSSR. Seria Fizicheskaia. Izvestia <u>13</u> , 188-202 (1949)		1955
AERE-Lib/Trans-592	Investigations of an Evaporative Condenser. Parts 1 and 2, by R.Coers. Trans. from Kältetechnik <u>7</u> , 34-8, 71-4 (1955)		1955
AERE-Lib/Trans-606	A Method for the Graphical Calculation of the Number of Theoretical Plates in an Electrolytic Plant with Exchange Towers for the Production of Heavy Water, by D.Dinelli. Trans. from Energia Nucleare <u>2</u> , 426-33 (1955)		1955
AERE-Lib/Trans-629 (Same as MISC 1956-11)	The Use of an Inhomogeneous Magnetic Field to Increase the Resolution of the Mass-Spectrometer, by N.E.Alekseevskii, G.P.Prudkovskii. Trans. from Akademia Nauk, SSSR. Doklady <u>100</u> , 229-32 (1955)		1955
BMI-550	The Thermodynamics of the Reduction of Uranium Compounds to Uranium Metal	A.W.Lemmon J.J.Ward S.M.Fischer, et al.	7-21-52
BMI-1067	The Solubility of Gases in Water and in Aqueous Uranyl Salt Solutions at Elevated Temperatures and Pressures	E.F.Stephan N.S.Hatfield R.S.Peoples, et al.	1-23-56

CF-52-6-67	Drying of Air in Activated Alumina Beds. Final Report	J.W.Foster Oak Ridge Nat'l Lab.	6-9-52
*DOW-108	Recovery of Uranium From Phosphate by Ion Exchange Summary Status Report No. 3	R.H.Bailes	12-7-49
HW-39971	Americium-241 As a Photon Source for the Gamma Absorptometric Technique	D.G.Miller	11-17-55
HW-40459	A Method for the Determination of Isotopic Ratio and Activity in Ru <sup>103</sup> - Ru <sup>106</sup> Materials	H.G.Rieck, Jr. R.J.Walker	12-15-55
HW-40497	Determination of Aluminum in Chromic-Phosphoric Acid Solutions; Determination of Aluminum in Aluminum Corrosion Products	C.Groot R.M.Peekema V.H.Troutner	1-16-56
KLI-1098	Separation of D <sub>2</sub> O/H <sub>2</sub> O by High Temperature Distillation	G.F.Mills Carbide and Carbon Chemicals. Co.K-25	9-26-51
MISC 1956-32	The Preparation and Utilization of Metallic Aerosols for Filter Paper Testing	J.Kohl R.D.Zentner Tracerlab, Inc.	
MISC 1956-33	Viscous Flow of Glass; Technical Report No. 11	H.T.Smyth New Jersey, Ceramic Research Station.	1-1-56
MISC 1956-34	Manual of Analytical Methods for the Determination of Uranium and Throium in Their Ores	New Brunswick Lab., AEC.N.J.	9-50
MISC 1956-71	Properties of Solutions in the Neighborhood of the Critical Temperature of the Solvent. Fifth Technical Report Covering the Period August 1, 1953 - November 30, 1955	S.W.Benson C.S.Copeland D.Pearson, et al. Univ. of Southern Calif.Los Angeles	12-1-55
*Microcards			

NBS-4420	A Study of Basic Limitations to the Concept and Measurement of Temperature: incomplete Equilibrium	C.M.Herzfeld	1-56
NYO-6506	The Evaluation of Some Related Heterocyclic Compounds as Analytical Reagents for Metals (Thesis)	J.L.Walter Pittsburgh	9-55
OSRD-5499	A Sensitive Photoelectric Smoke Penetrometer	F.T.Gucker, Jr. H.B.Pickard C.T.O'Konski National Defense Research Committee	8-28-45
RMO-2618	Mercury Cathode Cell Reduction of Carbonate Solutions. Final Report	J.C.Huggins Little (Arthur D.) Inc., Cambridge, Mass.	3-55
WIN-34	The Fluorimetric Determination of Uranium	F.A.Centanni A.M.Ross M.A.DeSesa	2-10-56
Y-553	Status Report and Plant Proposals for Zirconium Purification	W.M.Leaders	1-20-50
AEER-Lib/Trans-596	Investigation of the Effect of the Rate of Motion of the Water Current on the Heat Exchange Coefficient on Boiling in an Inclined Tube, by V.V.Bogdanov. Trans. from Akademiia Nauk, SSSR. Otdelenie Tekhnicheskikh Nauk. Izvestiia <u>1955</u> , no. 4, 136-40.		
CRR-557	The Cooling of NRX Rods	D.G.Hurst A.C.Johnson Chalk River Project, Ont.	2-3-54
DP-141	An Experimental Single-Tube Evaporator	G.S.Nichols E.S.Occhipinti	1-56

NP-5835                    The Engineering Application of the Absolute Rate                    M.B.Hogan                    5- 15-55  
Theory to the Creep of Lead. Technical Report No. 48                    Utah Univ.

METALLURGY AND CERAMICS

AECD-3693                    The Consolidation of Zirconium at Sub-Fusion                    H.R.Hoge                    4-17-50  
(WAPD-12)                    Temperatures                    B.Lustman  
Westinghouse Electric Corp.

AECD-3701                    Uranium-Zirconium Diffusion Studies                    D.R.Mash                    6-54  
(LRL-143)                                       B.F.Disselhorst  
Calif. Research  
and Dev. Co.Livermore  
Research Lab.

AECD-3704                    Continued Studies of Corrosion by Fused Caustic                    C.M.Craighead                    12-18-52  
(BMI-794)                                       L.A.Smith  
E.C.Phillips, et al.  
Battelle Memorial Inst.

AECD-3794                    Comparative Behavior of A 1.8 Atom. % Chromium-                    D.W.White                    7-14-50  
(KAPL-366)                    Uranium Alloy and Normal Uranium on Thermal Cycling                    Knolls Atomic Power Lab.

AECD-3796                    The Possibility of "Freezing-In" Radiation Damage                    E.P.Cooper                    6-20-50  
(NAA-SR-78)                    Effects in Simple Metals                    M.M.Mills  
North American Aviation.

AERE-Lib/Trans-627                    Study of Diffusion in the Interior and Along the                                       1955  
Boundaries of Metal Grains by the Method of Auto-  
radiography, by S.Z.Bokshtein, S.T.Kishkin, L.M.  
Moroz and T.I.Gudkova. Trans. from Akademiia Nauk,  
SSSR. Doklady 102, 73-5 (1955)

ANL-5360                    Some Theoretical Factors in the Zone Melting                    R.J.Dunworth                    2-56  
Process

LA-1959                    Oxidation of Metals Subjected to an Increasing                    J.T.Waber                    2-16-56  
Reaction Temperature                    R.Kleinberg

LA-1929	Oxidation of Metals Subjected to a Linear Temperature Increase: Cubic and Logarithmic Laws	J.T.Waber	2-20-56
MISC 1956-26	Final Report to Office of Naval Research Washington, D.C. on Isothermal Transformation of Austenite to Ferrite and Pearlite Under Externally Applied Tensile Stress	Columbia Univ.	10-1-55
MISC 1956-35 19 Quarterly	Titanium Program, Project TB4-15 (Subtask 1) Nineteenth Quarterly Progress Report, July 1 to September 30, 1955	Bureau of Mines Electrometallurgical Experiment Station, Boulder City, Nevada	
MISC 1956-38	The Effect of Brittle Skins on the Ductility of Metals. Technical Report No. 33 of an Investigation of the Effects of Stress Concentration and Triaxiality on the Plastic Flow of Metals	G.W.Form W.M.Baldwin, Jr. Case Inst. of Tech.	12-55
MISC 1956-42	Delayed Yielding in a Substitutional Solid Solution Alloy Forty Fifth Technical Report	L.A.Shepard J.E.Dorn Calif. Univ. Berkeley	2-1-56
MISC 1956-44	The Mechanism of Yielding; Final Report	D.S.Clark D.S.Wood Calif. Inst. of Tech.	9-55
MISC 1956-43	Preliminary Study of the Yielding of Notched Specimens Under Rapidly Applied Tensile Loads. Technical Report No. 12	J.A.Hendrickson D.W.Wood D.S.Clark Calif. Inst. of Tech.	8-55
MISC 1956-57	An Investigation of Scaling of Zirconium at Elevated Temperatures; Quarterly Status Report No. 10 for Sept. 2, 1955 to Dec. 2, 1955	C.A.Barrett E.B.Evans W.M.Baldwin, Jr. Case Inst. of Tech.	12-8-55

MISC 1956-68	I. Mode of Deformation and Fracture Near the Melting Point. II. The Iron-Chromium-Nickel Ternary System. III. Sub-Structure Studies. Periodic Status Report No. 13 for August 1955 - October 1955	N.J.Grant F.B.Cuff P.E.Price M.H.Happ Mass. Inst. of Tech.
MISC 1956-69	I. Mode of Deformation and Fracture Near the Melting Point. II. The Iron-Chromium-Nickel Ternary System III. Sub-Structure Studies. Periodic Status Report No. 14. 1 November 1955 - 1 February 1956	F.B.Cuff Jr. P.E.Price M.B.Happ, et al. Mass. Inst. of Tech.
MISC 1956-70	The Effect of Composition on the $M_s$ and Decomposition Temperatures in Stainless Steels	F.C.Monkman 1956 F.B.Cuff N.J.Grant Mass. Inst. of Tech.
NP-5836	Impact properties of Quenched and Tempered Alloy Steels. Final Report	H.Schwartzbart 9-19-55 J.P.Sheehan Illinois Inst. of Tech., Chicago.
NP-5851	Effect of Strain Rate and Temperature of the Plastic Deformation of High Purity Aluminum. Technical Report No. 44	T.A.Trozera 12-1-55 O.D.Sherby J.E.Dorn Calif. Univ.
NRL-4677	Procedures for Riserling Steel Castings	H.F.Bishop 12-30-55 W.H.Johnson
NRL-4683	The Effect of Gases in Steel	J.A.Rinebolt 1-16-56 R.H.Raring
NYO-7080	X-Ray and Calorimetric Investigations of Cold Working and Annealing of a Gold-Silver Alloy. Technical Report No. 22	B.L.Averbach 11-22-55 M.B.Bever M.F.Comerford, et al. Mass. Inst. of Tech.

SO-2044	Fundamental Research in Physical Metallurgy; Twenty-Eighth Quarterly Report. (Progress Report Number 45)	W.DeSorbo R.E.Hoffman R.A.Oriani, et al. General Electric Co.	1-5-56
TID-5184	Investigation of the Soundness of Wrought Zirconium. Final Report for January 5, 1953 - August 28, 1953	V.Pulsifer Illinois Inst. of Tech.	10-26-53
<u>PHYSICS</u>			
AD-65178	Measurement of the Microwave Properties of Ferrites at High Power Levels	J.L.Carter I.Reingold Evans Signal Lab. Belmar, N.J.	4-29-55
AD-68789	Time Diversion Multiplex Systems; Second Semi- Annual Report Period Covered: February 1, 1955 to June 30, 1955	Radio Corp. of America, Camden, N.J.	7-31-55
AECD-3661 (M-1324)	The Computation of Radiation Hazards	C.W.J.Wende	1-11-44
AECU-3112	Development of Dumont Photomultiplier Tubes. Report No. 18, Covering Period June 1, 1955 to August 31, 1955	B.R.Linden P.A.Snell R.E.Rutherford DuMont (Allen B.) Labs., Inc., Tube Research Labs., Passaic, N.J.	
AECU-3127	A Cloud Chamber Study of the Secondary Particles from Locally Produced Penetrating Showers (Thesis) Technical Report No. 20	N.F.Harmon Washington Univ.	9-55
AECU-3141	Angular Distribution of Fragments from the Photofission of U <sup>238</sup> ; Technical Report No. 24	Z.L.Reineks J.D.Finegan R.S.Shankland Case Inst. of Tech.	1955

A.E.R.E. C/R 1759	A Rapid Differential Thermometric Method for Determining the Energy Output of Radioactive Materials	A.G.White	10-5-55
A.E.R.E. ED/M 27 B.W.R. 6	Note on Density Relationships in Boiler Tubes	P.Fortescue	10-4-55
AERE-Lib/Trans-584	The Diffusion of Noble-Gas Fission Products in Uranium, by K.E.Zimen and P.Schmeling. Trans. from Zeitschrift für Elektrochemie and angewandte physikalische Chemie <u>58</u> , 599-601 (1954)		1955
AERE-Lib/Trans-606	A Method for the Graphical Calculation of the Number of Theoretical Plates in an Electrolytic Plant with Exchange Towers for the Production of Heavy Water, by D.Dinelli. Trans. from Energia Nucleare <u>2</u> , 426-33 (1955)		1955
AERE-Lib/Trans-613	Fission of Heavy Nuclei by Slow $\pi$ -Mesons, by N.A.Perfilov and N.S.Ivanova. Trans. from Zhurnal Eksperimental'noi i Teoreticheskoi Fiziki <u>28</u> , 732-4 (1955)		1955
AERE-Lib/Trans-626	Theory of the Scattering of Rapid Charged Particles. II. Repeated and Multiple Scattering, by Gert Moliere. Trans. from Zeitschrift für Naturforschung <u>3A</u> , 78-97 (1948)		1955
A.E.R.E. M/M 101	The Autoradiographic Determination of Self Diffusion Coefficients	A.D.LeClaire	8-29-55
A.E.R.E RP/M 45	One-Group Perturbation Theory for a Cylindrical Reacting Core	J.Codd	6-23-54
AWRE-O-6/55	A Negative Feed-Back Linear Modulator	B.G.Bristow	3-9-55
BNL-1779	The Temperature Coefficients of Thermal Utilization and $\eta$	R.S.Margulies	9-21-53

BNL-2074	Artificial Production of Heavy Unstable Particles	R.Madey	1955
CF-51-11-92	Pile Simulator Study of Neutron Flux in HRE Following a Decrease in Coolant Flow	S.Hanauer Oak Ridge Nat'l Lab., (Tenn.)	11-12-51
CF-53-2-134	Conversion in a Two-Region Reactor	M.Tobias P.N.Haubenreich R.E.Aven Same	2-16-53
CF-54-8-179	Certain Nuclear Data and Physical Properties to be Used in the Study of Thorium Breeders	M.Tobias Same	8-26-54
CRC-628	Determination of the Neutron Capture Cross-Sections of Pu <sup>242</sup> Pu <sup>238</sup> and Am <sup>243</sup>	J.P.Butler M.Lounsbury J.Merritt Chalk River Project.	1-56
DP-48	Reactivity Measurements in a Subcritical Pile	R.C.Axtmann G.Dessauer T.F.Parkinson	11-55
IDO-16011	Shielding Requirements for Experiments ANL 2 and KAPL 2	H.L.McMurry	4-1-52
IDO-16247	Experimental and Theoretical Values of the Gamma Decay Dose Rate and Heating From Spent MTR Fuel Elements	W.C.Francis L.L.Marsden	1-13-56
IDO-16248	A Critical Assembly Having Maximum Sensitivity	J.W.Webster	8-31-53
IDO-16252	Perturbation Theory and Applications. I. Theoretical	H.L.McMurry	1-11-56
LA-1960	An Analysis of Li <sup>6</sup> Neutron Cross Sections	J.J.Devaney	2-10-56

LA-1962	Some Solutions of the Diffusion Equation	J.C.Holladay	2-23-56
MISC 1956-18	Lectures on Pions and Nucleons Reprinted from: Nuovo Cimento	E.Fermi	
MISC 1956-19	Lectures on Fundamental Particles Reprinted from: Nuovo Cimento	B.Rossi	
MISC 1956-20	Lectures on Photoproduction Reprinted from: Nuovo Cimento	B.Bernardini	
MISC 1956-21	Technical Report for the Period 1 October 1954 to 30 September 1955	Chicago. Univ.	1955
MISC 1956-23	K-Mesons in Emulsions Exposed to A 6.2 Bev Proton Beam	J.Crussard V.Fouche J.Hennessy, et al. Paris. Ecole Polytechnique	1-26-56
MISC 1956-27	Breathing Vibrations of Planarly Isotropic Square Plates. Technical Report No. 8	H.G.Baerwald C.Libove Clevite Research Center,Cleveland	12-12-55
MISC 1956-28	Elastic, Piezoelectric and Dielectric Constants of Polarized Barium Titanate Ceramics and Some Applications of the Piezoelectric Equations. Technical Report No. 9	R.Bechmann Same	1-12-56
MISC 1956-29	High Speed Electron Multiplication by Transmission Secondary Electron Emission	E.J.Sternglass Westinghouse	7-25-55
MISC 1956-31	Pulse Transformer Design Procedures	P.R.Gillette R.M.Rowe Stanford Research Inst. (Calif.)	

MISC 1956-36	Range of 208 4 Mev Protons in G5 Nuclear Emulsion. (Notas De Fisica, V. 2, No. 3)	H.G.DeCarvalho J.I.Friedman Rio De Janeiro. Centro Brasileiro De Pesquisas Fisicas and Chicago Univ.	2-3-55
MISC 1956-37	A Synthesis of Covariant Particle Equations; Technical Report No. 26	L.L.Foldy Case Inst. of Tech.	12-10-55
MISC 1956-39	Investigation of Mixing in Traveling-Wave Tube Amplifiers. Series No. 60, Issue No. 151	G.A.Gray Calif. Univ.	11-11-55
MISC 1956-41	Machine Methods of Computation and Numerical Analysis Quarterly Progress No. 17. September 15, 1955 and Project Whirlwind Summary Report No. 43, Third Quarter, 1955.	Mass. Inst. of Tech.	
MISC 1956-47	Final Report, June 1, 1946 - February 28, 1955	Washington Univ. St. Louis.	
MISC 1956-48	A Self-Consistent Determination of the Nuclear Radius. Technical Report No. 6	M.Rotenberg Mass. Inst. of Tech.	9-55
MISC 1956-49	A Timing Circuit for the UCLA FM Cyclotron	L.K.Jensen Calif. Univ.Los Angeles	1-56
MISC 1956-50	The Representation of Charge Conjugation for Dirac Fields. Technical Report No. 27	B.P.Nigam L.L.Foldy Case Inst. of Tech.	12-15-55
MISC 1956-51	Proposed Princeton-Pennsylvania Three-Billion Volt High Intensity Proton Synchrotron; Technical Section	M.G.White G.K.O'Neill F.C.Shoemaker Princeton Univ.	12-55
MISC 1956-52	Analytic Approach for the Pion-Proton Scattering Phase Shifts; Technical Report No. 25	W.Rarita Case Inst. of Tech.	12-7-55

MISC 1956-53	Effects of Non-Primary Cosmic Radiation on the Number-Energy Relation and Geomagnetic Correlations Near the Top of the Atmosphere. (Thesis)	K.A.Anderson Minnesota.Univ.	1955
MISC 1956-54	A Hydrogen Bubble Chamber Used for Low-Energy Meson Scattering	D.E.Nagle R.H.Hildebrand R.J.Plano Chicago.Univ.	1955
MISC 1956-55	Beam Control System for the Chicago Synchrocyclotron	S.D.Warshaw S. C. Wright Argonne Cancer Research Hospital	1955
MISC 1956-59	Nonmesonic Decay of a Helium Hyperfragment	N.Seeman M.M.Shapiro B.Stiller Naval Research Lab.	7-55
MISC 1956-60	The Neutron Cross Section of $\text{Xe}^{135}$ as a Function of Energy	S.Berstein M.M.Shapiro C.P.Stanford, et al. Oak Ridge National Lab.	1955
MISC 1956-62	An Unstable $\text{H}_1^4$ Fragment from the Capture of $\Sigma$ -Hyperon	M.Schein D.M.Haskin D.Leenov Chicago.Univ.	1955
MISC 1956-63	Scattering of 30-95 Mev Photons by Protons	C.L.Oxley V.L.Telegdi Chicago Univ.	1955
MISC 1956-64	Nuclear Reactions and Element Synthesis in the Surfaces of Stars	W.A.Fowler G.R.Burbidge E.M.Burbidge Cambridge Univ.	1955

MISC 1956-65	The Form of the Divergences in Quantum Electrodynamics	J.C.Taylor Cambridge.Univ.	1955
MISC 1956-66	Renormalisation in Meson Theories	J.C.Taylor Cambridge.Univ.	9-55
MISC 1956-67	On Generalised Dispersion Relations	Abdus Salam Cambridge.Univ.	1955
MIT-QPR-AC-LAB- Oct.-Dec.1955	Quarterly Report October -December,1955		
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NBS-2365	"Monte Carlo" Methods for the Iteration of Linear Operators	J.H.Curtiss	3-19-53
NP-5859	The Velocity Spectrum of Cosmic Ray Particles at Thirteen Grams Atmospheric Depth (Thesis)	E.N.Mitchell Minnesota.Univ.	1955
NP-5860	Cerenkov Counter Measurement of Multiply Charged Cosmic Rays	J.Linsley Minnesota.Univ.	1956
ORNL-1975	Physics Division Semiannual Progress Report for Period Ending September 10, 1955	J.L.Fowler E.O.Wollan	
PIB-347 (AD-68546)	Miniature Strip Transmission Line for Microwave Applications	E.N.Torgow J.W.E.Griemsmann Brooklyn Polytechnic Inst.	2-55
TID-5214 (NNES-I-10)	Electrical Equipment for Tanks and Magnets	C.R.Baldock E.D.Hudson Tennessee Eastman Corp.	4-47
WASH-291 (Pt.1)	Papers Presented at the Statistical Section Annual Meeting of Accountability Representatives, June 20 and 21, 1955	M.N.Hudson	12-55
ANL-5513	The Fast Critical Assembly	B.C.Gerutti D.Okrent R.E.Rice, et al.	1-56

CRRP-624	Material Balance in Reactors with Recycled Fuel. (Reactor Core Conference, January 9th-12th, 1956, Chalk River, Ont.)	G.C.Laurence Chalk River Project, Canada	1-4-56
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IDO-16250	Reactivity Measurement Facility Manual for Initial Startup	S.G.Forbes	9-27-54
MISC 1956-25	Nuclear Reactor Data	Raytheon Mfg.Co.	11-15-55

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ANL-5535	Additions to the Library Report for the Period February 1-14, 1956 Technical Reports and Books	P.A.Schulze	
ASTIA-U-98	Title Announcement Bulletin No. U-98	Armed Services Tech. Info.Agency.	2-3-56
MISC 1956-24	Nineteenth Semiannual Report of the Atomic Energy Commission	Atomic Energy Comm.(Washington,D.C.)	1-56
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LIST OF UNCLASSIFIED REPORTS ISSUED BY THE UCRL INFORMATION DIVISION

UCRL-2674	Purification of Milk for Calcium and Strontium with Dowex-50 W Resin	W.E.Nervik M.I.Kalkstein W.F.Libby	8-12-54
UCRL-3017	Preparation and Some Properties of Ribulose-1, 5-Diphosphate	J.R.Quayle	1-56

UCRL-3105	A Special Consideration of the Aging Process, Disease, and Life Expectancy	H.B.Jones	11-1-55
UCRL-3195	Utilizing Plastic Impregnation in Equipment for Nuclear Research	W.W.Salsig, Jr.	12-55
UCRL-3209	Ion-Exchange Behavior of Actinides and Lanthanides	J.P.Surls, Jr.	1-56
UCRL-3227	Degradative and Synthetic Studies on Colchicine	D.E.Pack	12-55
UCRL-3229	Application of General Theoretical Principles to Experiments - Lecture 2 Selection Rules for Decays	C.Goebel	12-13-55
UCRL-3240	Chemistry Division Quarterly Report September, October, November 1955		12-20-55
UCRL-3242	Phosphate Transients in Photosynthesis	D.F.Bradley	12-21-55
UCRL-3253	An Improved Fallout Meter Using CdS	L.Ruby	1-10-56
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UCRL-3280	Crystal Structure and Magnetic Susceptibility of Americium Metal	P.Graf B.B.Cunningham C.H.Dauben	2-22-56
UCRL-3309	List of Unclassified Reports Received and Issued by the UCRL Information Division During the Period of February 1-15, 1956		