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

October 5, 1954

Printed for the U. S. Atomic Energy Commission

LIST OF CODES FOR REPORT NUMBERS

ACCO -American Cyanamid Co.
AERE -Atomic Energy Research Establishment, Harwell, England
AFCRC -Air Force Cambridge Research Center
AMRL -Army Medical Research Lab., Fort Knox
ANL -Argonne National Lab.
ANP -Aircraft Nuclear Propulsion Project, Oak Ridge
APEX -General Electric Co., Aircraft Gas Turbine Div.
ASTIA -Armed Services Technical Information Agency
BM -Bureau of Mines
BM-II -Northwest Electrodevelopment Lab., Bureau of Mines,
Albany, Oregon
BMI -Battelle Memorial Institute
BNL -Brookhaven National Lab.
BRL -Ballistic Research Labs., Aberdeen Proving Grounds
CEA -Commissariat à l'Énergie Atomique, France
CEI, CRC, CRE, CRP, CRT and others
-Chalk River Project, Canada
CEPS -Commonwealth Edison Co.
CERN -European Council for Nuclear Research
CF -Oak Ridge National Lab., Central Files
CU -Columbia University
DC -General Electric Co., ANP Project
DOW -Dow Chemical Co.
DP -E. I. du Pont de Nemours and Co.
FMPC -National Lead Co. of Ohio
HW -Hanford Works, Richland, Wash.
ISC -Iowa State College
JENER -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 IN THE UCRL INFORMATION
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Radiation Laboratory, Department of Physics,
University of California, Berkeley, California

October 5, 1954

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*AECU-1765	Oxidation of Endogenous Fatty Acids of Rat Tissues, in Vitro	M. Volk R. Millington S. Weinhouse Lankenau Hosp. Res. Inst.	
*AECU-1821	Cellular Respiration, Cell Division, and Ionizing Radiations	E. Barron S. Seki Argonne Nat'l Lab.	10-51
*AECU-1968	Acetylation of Amino Acids by Enzymes of <u>Clostridium Kluveri</u>	J. Katz I. Lieberman H. Barker Univ. of Calif., Berkeley	
*AECU-1978	The Use of Cobalt 60 Applicators in the Treatment of Carcinoma of the Female Genital Tract	J. Morton A. Barnes, et al. Ohio State Univ.	
*AECU-2923	Experimental Administration of Ethylenediamine- tetraacetic Acid in Plutonium Poisoning	H. Foreman, Los Alamos P. Fuqua, W. Norwood, Hanford	1954
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*NP-5257	Changes in the Proteolytic and Antiproteolytic Activity of the Blood Serum in Man and Animals Following Exposure to X-Rays. (Project No. 21-3501-0004, Report No. 4)	K. Burdon R. Guthrie Sch. of Aviation Medicine.	

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NYO-1591	Air Cleaning Studies. Progress Report for July 1, 1952 to June 30, 1953.	M. First L. Silverman, et al., Harvard	8-5-54
UR-338	Studies of Flash Burns: the Influence of Skin Temperature in the Production of Cutaneous Burns in Swine	K. Berkley H. Pearse T. Davis	8-5-54
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*AD-18240	The Electrodeposition of Titanium from Aqueous Solutions. Final Technical Report.	T. Franklin F. Denise Virginia Inst. for Sci. Res.	8-31-53
*AECU-1980	Bromine Atom Catalyzed Rearrangements of the Three Isomeric Bromopropenes	E. Burrell (Thesis) Notre Dame	8-1-51
*AECU-2344	Note on Bomb Reduction of Chromium Trifluoride with Calcium	A. Beard Knolls	
*AECU-2732	Application of Radioactive Tracers to Distillation and Extraction Studies. Summary Report for the Period October 1, 1948 to January 31, 1951	J. Maloney H. Hughes, et al. Kansas Univ.	10-52
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*ATI-129118	Bibliography and Source Material on Nitric Acid with Emphasis on its Use as an Oxidizer for Rocket Fuels. Report No. 515-801	K. Elsas Bendix Aviation Corp.	12-31-51
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*BM-RI-4882	Volumetric Determination of Small Quantities of Uranium with Special Reference to Errors Associated with Use of Jones Reducter	C. Sill H. Peterson	6-52
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*NBS-3197	Electrodeposition of Titanium (Quarterly Progress Report for) January 1 - March 31, 1954	W. Reid J. Bish A. Brenner	4-1-54
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NM-000-018.06.35	On the Theory of the Donnan Membrane Equilibrium	T. Hill	6-29-54
*NP-4177	Diffusion in Catalytic Heterogeneous Systems; Studies in Vapor Phase Esterification	N. Amundson M. Stusiak Univ. of Minnesota	11-3-52
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SO-3256	The Diffusion-Distillation Process for the Separation of Isotopes. Semi-Annual Report	Rensselaer Polytechnic Institute	4-1-54

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*BM-RI-4796	Oil-Shale Operations in New South Wales, Australia	A. Kraemer H. Thorne	7-51
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*ANL-HE-93	Pressure Loss in Piping Systems; A Comparison of Conventional Factors for Fluid Friction in Piping Components	R. Armstrong	
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*AECU-1761	Collector-Depressant Equilibria in Flotation; I. Inorganic Depressants for Metal Sulfides	G. Last M. Cook Univ. of Utah	10-1-51
*AECU-1993	Vanadium	A. Seybolt Knolls	
*AECU-2088	Fundamentals of Glass to Metal Bonding. II. Wettability of Some Group I and VIII Metals by Several Sodium Silicate Glasses; Second Technical Report	V. Zackay D. Mitchell, et al. Inst. of Eng. Res., Univ. of Calif.	4-15-52
*AECU-2330	Technical Progress Report (on) Creep of Alloys Research (for) July 1 to December 1, 1952	E. Parker T. Hazlett Inst. of Eng. Res., U.C.	12-1-52

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

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*MIT-1116	Ultrasonic Testing of the Bond in Clad Metal Tubes	W. Lees, Nuc. Metals, Inc.	8-2-54
*NACA-TN-3197	Mechanical Properties at Room Temperature of Four Cermets of Titanium Carbide with Nickel Binder	A. Johnson, Jr.	4-6-54
*NAVORD-1595	The Development of X-Ray Standards for Shielded Arc Welds in Aluminum	J. Hirschfield D. O'Connor, et al.	11-21-50
NBS Circular 556	Thermal Conductivity of Metals and Alloys at Low Temperatures - A Review of the Literature	R. Powell W. Blanpied	9-1-54
NYO-3699	Electrochemical Studies of Non-aqueous Melts Quarterly Progress Report for Period Ending July 1, 1954	R. Mehl G. Derge Carnegie Inst. of Tech.	9-54
NYO-3965	The Study of Diffusionless Phase Changes in Solid Metals and Alloys Progress Report for Period December 1, 1953 to February 28, 1954	T. Read D. Lieberman, et al. Columbia Univ. Sch. of Mines	7-14-54
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SO-2516	Preferred Orientations in Beta-Annealed Zirconium Report No. RL-1148	J. Keeler A. Geisler General Electric Res. Lab.	8-54
*WADC-TR-53-9	Refractory Materials for Use in High-Temperature Areas of Aircraft	N. Thielke	1-53
*WAL-401/68-42	Torsion Pre-Strain and the Fatigue Life of RC-55 Titanium Alloy. Interim Report	J. Kaufman E. D'Appolonia Carnegie Inst. of Tech.	1954
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*AECU-1783	Electronic Devices for Nuclear Physics; Quarterly Report; July 1951 - October 1951	G. Morton Radio Corp. of America	
*AECU-1969	General Purpose Floating Decimal Panels for the IBM Card-Programmed Electronic Calculator-Model II	S. Lida Los Alamos	
*AECU-1975	Activation Cross Sections Measured with Antimony-beryllium Photoneutrons	C. Kimball (Thesis) Argonne Nat'l Lab.	3-52
*AECU-1979	A New Sample Mounting Mechanism and Associated Equipment for Use with the 1.25 Mev Van de Graaff Generator	S. Black Argonne Nat'l Lab.	3-52
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*AECU-2083	Preliminary Report on the Testing of RCA Improved Cathode Ray Tubes for Application in Williams Memory System	J. Chu R. Klein Argonne Nat'l Lab.	5-9-52
*AECU-2921	Investigations on Cs ¹³⁷	W. Kinney(Thesis) Rensselaer Polytechnic Inst.	9-53
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*CERN-PS/KJ-10	Momentum Compaction Relationship in the New Type Synchrotron with Straight Sections	K. Johnsen	10-9-52
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N - NP -2563d	Techniques and Materials for use at Liquid Hydrogen Temperatures, Information Secured at Ohio State University March 7-9 1950	M. Benedict P. Graff Hydrocarbon Res, Inc.	4-11-50

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

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

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BNL 299 (S-22)	Quarterly Progress Report April 1 - June 30, 1954 Unclassified Section		
MISC 1954-29 No. 65	Translated Contents Lists of Russian Periodicals No. 65 August 1954	Dept. of Scientific and Industrial Res. (Great Britain)	8-54
MISC-1954-30 No. 5	Nuclear Notes for Industry No. 5	TIS OR	
MISC-1954-79	Inventory of Electromagnetically-Enriched Isotopes	C. Keim Carbide and Carbon Chem. Corp.	
MISC-1954-84	Technical Report No. 9	H. Sponer Duke Univ.	7-1-54
MISC-1954-85	Technical Report No. 10	H. Sponer Duke Univ.	8-15-54
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NBS-3364	Technical Memorandum No. 25 on Research and Development a High-Vacuum Seal-off Valve	R. Richards	8-20-54
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NYO-4582	Annual Report on Research Project	G. Failla H. Rossi Columbia Univ.	4-1-54
UR-348	Quarterly Technical Report April 1 thru June 30, 1954		8-26-54

REPORTS ISSUED BY INFORMATION DIVISION, UCRL

UCRL-2561	Interphase Transformers for Parallel Inverters	L. Rovelsky (Thesis)	5-20-54
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