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UNIVERSITY OF CALIFORNIA

Radiation Laboratory
Berkeley, California

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LIST OF UNCLASSIFIED REPORTS RECEIVED AND ISSUED BY THE UCRL
INFORMATION DIVISION DURING THE PERIOD OF SEPTEMBER 16 - 30, 1958

October 2, 1958

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).

- SPECIAL NOTICE -

PREPRINTS OF U. S. GENEVA CONFERENCE PAPERS

The UCRL Technical Information Division has received preprints of many of the U. S. papers to be given at the United Nations International Conference on Peaceful Uses of Atomic Energy, 2nd, Geneva, September, 1958. Preprints of papers have been sent out on limited distribution from the AEC.

We are receiving two copies of each paper, one copy will be kept for reference use, and the second copy will be available for general use.

Papers are indexed by conference number and senior author only. Papers will be kept until the published proceedings of the conference are available.

LIST OF UNCLASSIFIED REPORTS RECEIVED AND ISSUED BY THE UCRL
INFORMATION DIVISION DURING THE PERIOD OF SEPTEMBER 16 - 30, 1958

Radiation Laboratory
University of California
Berkeley, California

October 2, 1958

<u>Report Number</u>	<u>Title</u>	<u>Author</u>	<u>Date</u>
<u>BIOSCIENCES</u>			
UCRL-594	Health and Safety in Canadian Operations.	G. C. Butler, G. Cosper, C. A. Mawson, et al. Atomic Energy of Canada Ltd., Chalk River, Ont.	9-58
UCRL-624	Cobalt-60 Beam Therapy.	I. H. Smith, et al. Same	9-58
UCRL-625	Inhalation Radiocardiography.	C. H. Jaimet, R. H. Tomlinson, P. F. Nace Same	9-58
UCRL-628	The Metabolic Response to Radiation Injury in the Primate.	C. G. Hunter Same	9-58
UCRL-629	Canadian Experience in the Measurement and Control of Radiation Hazards in Uranium Mines and Mills.	S. D. Simpson, C. G. Stewart, G. R. Yourt, et al. Same	9-58
UCRL-630	On the Excretion of Strontium-90 and Cesium-137 by the Human.	C. G. Stewart, E. Vogt, A. J. W. Hitchman, et al. Same	9-58

AERE-HP/M-41	The Measurement of the Radioactivity of the Cooling Gas From the Harwell Pilo.	R. N. Crooks, H. J. Gale	7-31-52
AERE-HP/R-2381	Measurements of the Near-Ground Radon Concentration on the AERE Airfield.	H. J. Gale, L. H. H. Peaple	4-58
EPF-I/R-1063 (Rev.)	An Isotope Handling Calculator. (MK. II.)	R. West	6-58
AERE-MED/M-24	Notes on the Toxicology of Methyl Alcohol.	F. M. Turner	5-58
AERE-MED/R-2587	The Alpha Counting of a Thick Film with a Pulse Amplitude Analyser Type 1114A.	W. P. Hutchinson	5-58
AERE-792	Chemical Investigations of the Movement of Fission Products in Soil.	E. J. Evans Chalk River Project	9-58
DO-AM/CA-174	The Determination of Mercury in Human Urine. Analytical Method.	U.K.A.E. Authority. Industrial Group. Capenhurst Works, Capenhurst, Ches., England	1958
1858(2nd Ed.)	Analytical Procedures of the Industrial Hygiene Group.	J. McClelland, Comp.	9-1-58
6899	Quarterly Progress Report No. 28.	Chicago Univ. Air Force Radiation Lab.	7-15-58
58.9	Environmental Radioactivity at RISB April 1, 1957 - March 31, 1958.	A. Aarkrog, J. Lippert Denmark. Atomenergi-kommissionen, Roskilde	6-58
3310	Radioactive Waste Processing and Disposal. A Bibliography of Selected Report Literature.	H. E. Voreas, T. F. Davis, T. N. Hubbard, Jr.	6-58

USNEDL-TR-240	Residual Gamma Radiation Fields From Induced Soil Activities.	R. L. Mathur	4-9-58
USNEDL-TR-249	A Theory for Close-In Fallout.	A. D. Anderson	7-23-58
W-1461	Blast Effects on Glass Vacuum Containers. Project 38.1-II (of) Operation Plumbbob. Report to the Test Director.	E. P. Lueg, H. V. Leininger Food and Drug Administration, (Washington, D. C.) and Federal Civil Defense Administration, Battle Creek, Mich.	9-19-58
W-1234	Accidental Radiation Excursion at the Y-12 Plant June 16, 1958. Final Report.		9-12-58

CHEMISTRY

UCRL-597	Absolute Yields of the Isotopes of Xenon and Krypton in the Neutron Fission of Pu-239.	K. Fritze, C. C. McMullen, H. G. Thode Atomic Energy of Canada Ltd., Chalk River, Ont.	9-58
UCRL-598	Heavy-Water Monitoring by Infrared Spectroscopy.	W. H. Stevens, J. G. Bayly Same	9-58
UCRL-599	Activation Analyses of Interest to Atomic-Energy Programs.	R. E. Jervis, W. D. Mackintosh Same	9-58
UCRL-613	Radiochemical Methods Applied to the Determination of Cross Sections of Reactor Interest.	T. A. Eastwood, A. P. Baerg, C. B. Bigham Same	9-58
UCRL-626	Some Recent Applications of Isotopes in Research and Control in Industry.	J. W. T. Spinks Same	9-58
UCRL-627	The Adsorption of Tracers on Mineral Particles.	G. G. Eichholz, W. N. Roberts Same	9-58
UCRL-637	Some Variations of Uranium-Ore Treatment Procedures.	E. A. Brown, A. J. Gilmore, W. A. Gow, et al. Same	9-58
UCRL-638	Canadian Refining Practices in the Production of Uranium Trioxide by Solvent Extraction with Tributyl Phosphate.	J. C. Burger, J. McN. Jardine Same	9-58
UCRL-639	Canadian Development Work with Moving-Bed Reactors for Reduction of Uranium Trioxide and Hydrofluorination to Uranium Tetrafluoride for Subsequent Production of Metal.	F. W. Melvanin Same	9-58

ECL-640	Beneficiation of Low-Grade Pegmatites.	A. B. VanCleave, R. L. Eager Atomic Energy of Canada Ltd., Chalk River, Ont.	9-58
ECU-3623	Fast Transient Heating and Explosion of Metals Under Stagnant Liquids.	A. J. Bendler, J. K. Rorco, N. H. Wagner Columbia Univ., N. Y. Eng. Res. Labs.	2-12-58
AEU-3769	Temperature Dependence of Tafel Slope in the Formation of Very Thin Anodic Oxide Films on Niobium.	G. B. Adams, Jr., T. Kao Oregon Univ., Eugene	1957
ERE-C/M-340	The Etching of Radiation Damage in Lithium Fluoride.	D. A. Young	5-58
AEER-C/M-342	The Diffusion of Iodine in Air.	H. J. de Nordwall, R. H. Flowers	5-58
AEER-C/R-2388	The Co-Precipitation of Small Amounts of Plutonium on Lanthanum Fluoride in the Presence of Uranium.	G. N. Walton, E. Furby, V. Osen	2-51
ERE-C/R-2613	The Analysis of Thorium-Indium Alloys.	G. W. C. Milner, J. W. Edwards	6-58
ERE-CE/M-230	Thorium Oxalate Dihydrate as a Thorium Standard.	P. J. Alder, R. Todd	7-58
ERE-E/R-2518	The Degradation of Plasticized P.V.C. Compositions Under High Level Gamma Radiation. Interim Report.	H. Wells, I. Williamson	5-58
AEER-GP/R-2058(2)	Thermal Diffusion Plant for the Enrichment of Helium 3 from Atmospheric Helium. Part 2. Performance of the Plant.	R. W. Bowring, R. H. Davies	3-58

ERE-Lib/Trans-778	Research on the Best Conditions for Using a Fabry-Pérot Photo-Electric Spectrometer, by R. Chabbal. Trans. from Journal des Recherches du Centre National de la Recherche Scientifique, No. 24, 138-86 (1953).	U.K.A.E. Authority. Research Group. Atomic Energy Res. Establishment, Harwell, Barks, England	
ERE-Lib/Trans-787	Analytical Chemistry of the Actinides, by P. N. Paloi. Trans. from Zhurnal Analiticheskoi Khimii 12, 647-64 (1957).	Same	
ERE-Lib/Trans-788	Use of Radioactive Isotopes in Analytical Chemistry, by I. P. Alimarin and N. A. Rudnev. Trans. from Zhurnal Analiticheskoi Khimii 12, 587-92 (1957).	Same	
ERE-Lib/Trans-791	Determination of Hydrolysis Constants and Constants of Complex-Formation of Zr^{4+} with Nitrate and Chloride Ions by Extraction Methods, by A. S. Solovkin. Trans. from Zhurnal Neorganicheskoi Khimii 2, 611-22 (1957).		
ERE-M/M-194	Some Experiments on the Fused Salt Processing of Liquid Metal Fuels.	J. K. Higgins Same	6-58
ENE-M/R-2511	The Relation of the Electrokinetic Potential to Adsorption at the oil/water Interface.	P. J. Andersen	3-58
ENL-5889	Hydrogen and Oxygen Isotopes Applied to the Study of Water-Metal Reactions. Exchange of D_2O^{18} with Alpha Alumina Monohydrate.	R. B. Bernstein	8-58
EP-58-8-36	A Chemical Engineering Development Program. An Investigation of the Kinetic Mechanisms of Uranyl Salt Ion Exchange.	S. H. Jury ORNL, Tenn.	8-11-58
ORFD-757	Comparison of Binder/Lubricant Additives in Dry Pressing Uranium Dioxide Powder.	E. Mizzan, G. H. Chalder Atomic Energy of Canada Ltd. Chalk River Project, Chalk River, Ont.	6-58
291	Adsorption of Ruthenium by Ion Exchange Resins.	C. A. Prohaska	6-58

P 199	IBM 650 Routine III. Solution of Simultaneous Differential Equations.	R. R. Haefner	7-58
SEC-82	Boron Isotope Enrichment: Pilot Plant Proposal for the Anisole - BF ₃ System.	K. O. Hambrock, G. T. Miller Hooker Electrochemical Co., Niagara Falls, N. Y.	12-23-57
58-451	Effect of Surface Condition on the Initiation of Plastic Flow in Magnesium Oxide. Third Technical Report.	R. J. Stokes, T. L. Johnston, C. H. Li Honeywell Research Center, Hopkins, Minn.	9-58
4438	Uranium Analysis by Gamma Absorptiometry.	R. E. Connally, U. L. Upson, P. E. Brown, et al.	5-20-58
GO-AM/CA-110	The Analysis of Sodium Metal and Sodium-Potassium Alloy (Collected Capenhurst Methods).	U.K.A.E.A. Industrial Group, Capenhurst Works, Capenhurst, Ches., England	3-58
GO-AM/CA-173	The Determination of Mercury in Atmosphere. Analytical Method.	Same	1958
UN-TN/S-717	The Thermodynamic Properties of the Niobium Chlorides. Technical Note.	Gt. Brit. Springfields Works, Springfields, Lancs, England	1958
UKL-T/C-75	Germanium, Indium, Niobium, Titanium and Hydrogen, by H. Hagen and A. Sieverts. Trans. from Zeitschrift für anorganische und allgemeine Chemie <u>185</u> , 225-38 (1930).	U.K.A.E.A. Industrial Group, Culcheth Labs., Culcheth, Lancs, England	
UKL-T/C-70	Theory of the Cascade for the Separation of Binary Mixtures of Isotopes, by O. K. Davtian. Trans. from Zhurnal Fizicheskoi Khimii <u>31</u> , 283-90 (1957).	U.K.A.E.A. Industrial Group H. Q., Risley, Lancs, England	

UCRL-T/CA-73	A Process for Separating Mixtures of Isotopes by Diffusion in a Stream of Mercury Vapour, by G. Herts. Trans. from Zeitschrift für Physik <u>91</u> , 810-5 (1934).	U.K.A.E.A. Industrial Group. Capenhurst Works, Capenhurst, Chas., England	
LA-1721(2nd ed.)	Collected Radiochemical Procedures.	J. Kleinberg, comp.	8-18-58
BNW-1418	Uranium Recovery from Slag by Fluoride Volatilization. A Process Proposal.	R. M. Edwards, J. A. Kennelley, E. F. Sanders	9-15-58
WISC-1958-319	Imperfection Interactions in Aluminum Oxide. Technical Report No. 9.	P. Gibbs Utah. Univ., Salt Lake City	7-1-58
WISC-1958-323	Capacities of Solid Metal-Solution Interfaces. Technical Report.	N. Hackerman, J. J. McMullon Texas. Univ., Austin	8-1-58
LM-1079	Viscosity of Fused Mixtures of Sodium Fluoride, Beryllium Fluoride, and Uranium Fluoride.	B. C. Blanke, K. W. Foster, L. V. Jones, et al.	9-19-58
Monograph 3045	General Theory of Bimolecular Reaction Rates in Solids and Liquids. Reprinted from Journal of Chemical Physics <u>28</u> , 103-6 (1958).	T. R. Waite Bell Tel. Labs., Inc., N. Y.	7-58
AP-6923	Gamma Removal Dose Calculations.	W. R. Burrus Lockheed Aircraft Corp., Marietta, Ga.	7-58
ORNL-2508	An Evaluation of Asphalt and Other Materials for Lining Radiochemical Waste Storage Basins.	A. J. Holberg, C. D. Watson, G. A. West	9-10-58
ORNL-2532	An Electrolytic Procedure for the Removal of Ruthenium and Nitrate from Alkaline Waste Solutions.	A. F. Messing, I. R. Higgins	9-19-58

ORNL-2550	Equipment Decontamination Methods for the Fused Salt-- Fluoride Volatility Process.	R. L. Jolley, R. D. Baybars, D. O. Campbell, et al.	9-10-58
PR-CM-14	Chemistry and Metallurgy Division Progress Report (for) April 1, 1958 to June 30, 1958.	Atomic Energy of Canada Ltd., Chalk River Project, Chalk River, Ont.	n.d.
SCEL-E-1162	Effects of Impurities on the Resonator and Lattice Properties of Quartz. Engineering Report E-1162.	D. L. Hammond, A. R. Chi, J. M. Stanley Signal Corps Eng. Labs., Fort Monmouth, N. J.	
TID-3076	Isotopes. A Bibliography of United States Research and Application 1955-1957.	J. A. McCormick, comp.	5-58
ORNL-97	Amenability Testing of Ore Samples from the Gas Hills District of Wyoming.	H. I. Viklund, E. J. Hammond, R. U. Johnson	7-10-58
ORNL-102	A Continuous Countercurrent Resin-In-Pulp Process.	J. B. Breymann, E. T. Hollis, J. T. Lynch	7-18-58
ORNL-105	Laboratory Investigation of Single-Stage and Continuous Countercurrent Ion Exchange Methods.	E. T. Hollis, R. J. Woody	7-1-58
ORNL-110	Alkaline Leach - Filtration Pilot Plant Testing of Phillips Petroleum Company Ore.	H. E. Dixon, G. Winslow	7-1-58

ENGINEERING

AERE-ES/M-27	DIDO Remote Active Handling Facility "Feed" Unit.	K. J. Williams U.K.A.E.A. Res. Group. Atomic Energy Res. Establish- ment, Harwell, Berks, England	6-58
AERE-Lib/Trans- 786	Heat Transfer and Pressure Drop in Rough Tubes, by Wolfgang Nunner. Trans. from Forschungshft <u>455</u> , 5-39 (1956).	Same	
AERE-R/M-159	A Variable Area Flowmeter Using Radioactive Isotope Techniques.	P. T. Blacker, D. M. Harris Same	6-58
AERE-R/R-2525	Some Tests on Standard Electric Motor Insulation at High Temperatures.	S. T. Naish, D. M. Harris Same	5-58
APEX-401	Stress Resultants and Out-of-Plane Deformations in Stiff Rings Attached to Elastic Cylinders and Subject to Concentrated Loads.	B. W. Shaffer, E. E. Ungar	8-58
CF-58-8-10	Salt-Lubricated Hydrodynamic Journal Bearing Tests Nos. 1 and 2.	P. G. Smith ORNL, Tenn.	8-7-58
EN-56195	Radiation Damage to Concrete.	R. G. Clark	3-31-58
MISC-1958-174 #15	Accession List No. 15. Covering the Period August 1 to August 31, 1958.	Battelle Memorial Inst. Radiation Effects Info. Center, Columbus, Ohio	9-15-58
Monograph 2985	Optimum Tolerance Assignment to Yield Minimum Manufacturing Cost. Reprinted from Bell System Technical Journal <u>37</u> , 461-84 (1958).	D. H. Evans Bell Tel. Labs., Inc., N. Y.	7-58
NAEF-58-35T	Effect of Radiation on the Electrical Properties of Electronic Components. V. Relays,	A. B. Spears Convair, Fort Worth, Tex.	8-22-58

WP-6865

Technical Memorandum No. 4 on Energy Levels Produced in
Semiconductors by High-Energy Radiation.

L. W. Aukerman,
F. J. Roid
Battelle Memorial Inst.
Rad. Effects Info. Center,
Columbus, Ohio

7-15-58

WID-3305(Suppl.1)

Heat Transfer and Fluid Flow. A Bibliography of Selected
Report Literature.

J. M. Jacobs, comp.

6-58

GEOSCIENCES

AECL-631	Types and Ore Reserves of Canadian Radioactive Deposits.	J. W. Griffith, A. H. Lang, S. C. Robinson, et al. Atomic Energy of Canada Ltd., Chalk River, Ont.	9-58
AECL-632	On the Geology and Radioactive Deposits of Blind River Region.	S. M. Roscoe, H. R. Steacy Same	9-58
AECL-633	Geology and Uranium Deposits of Beaverlodge Region, Saskatchewan.	L. P. Tremblay Same	9-58
AECL-634	Uranium Deposits of Bancroft Region, Ontario.	S. C. Robinson, D. F. Hewitt Same	9-58
AECL-635	The Radioactive Pegmatites of Saskatchewan.	J. B. Mawdsley Same	9-58
AECL-636	Mining Methods and Production Costs at Major Canadian Uranium Mines.	R. E. Barrett, R. R. Bassermann, Barry Bourne, et al. Same	9-58

METALLURGY AND CERAMICS

AECL-600	Effects of Neutron Irradiation on Mechanical Properties of Ferritic Steels and Irons.	L. P. Trudeau Atomic Energy of Canada Ltd., Chalk River, Ont.	9-58
AECL-601	Irradiation Experience with Rods of Plutonium-Aluminum Alloy.	O. J. C. Runnalls Same	9-58
AECL-602	The Fabrication and Properties of Uranium Dioxide Fuel.	G. H. Chalder, N. F. H. Bright, D. L. Paterson, et al. Same	9-58
AECL-604	Chalk River Experience with Zircaloy-2 and Aluminum-Nickel-Iron Alloys in High-Temperature Water.	F. H. Krenz, G. J. Biefer, N. A. Graham Same	9-58
AECL-615	Long Irradiation of Natural Uranium.	D. S. Craig, G. C. Hanna, D. G. Hurst, et al. Same	9-58
AERE-M/M-197	Measurements of Unit Cell and Physical Dimension Changes of Molybdenum After Neutron Irradiation.	J. Adam, D. G. Martin	7-58
AERE-M/R-2332A	The Injection of Helium Into Cast Beryllium.	R. S. Barnes, G. B. Redding	5-58
AERE-M/R-2515	The Tensile Properties of Steel Irradiated With Neutrons.	A. T. Churchman, D. Hull, I. L. Mogford	3-58
AERE-M/R-2536	The Effects of Neutron Irradiation on the Ductile-Brittle Transition Temperatures of Weldable Structural Steel Plates. Examination of a Welded Ducol W.30 Steel Plate of 1/2 5/8 in. Thickness.	R. C. Burnett, J. M. N. Allen, D. R. Harries	4-58
AERE-M/R-2554	The Mechanical Properties of Uranium-Molybdenum Alloys.	M. B. Waldron, R. C. Burnett, S. F. Pugh	1958

AERE-M/R-2555	Estimation of the Increase in Notched Impact Transition Temperature of Steels Irradiated with Neutrons.	D. Hull, I. L. Mogford	4-58
AERE-M/R-2582	Work Softening in Irradiated Copper.	M. J. Makin	5-58
AERE-M/R-2604	Design for an Autographically Recording Tensile Machine.	M. A. Adams	6-58
AERE-R/M-165	High Temperature Graphite Joints.	R. Aves, D. Barnes, T. A. J. Jaques, et al.	4-58
ANL-5442	Casting Uranium-5 w/o Zirconium-1.5 w/o Niobium Alloys Into Zirconium and Zircaloy-2 Containers.	J. W. Frank, R. E. Macheroy	7-58
ANL-5749	Properties and Handling Practices for Magnesium. A Literature Survey.	M. Beederman, G. A. Bennett, L. Burris, Jr., et al.	3-58
ARF-2068-5	The System Zirconium-Iron-Tin. Report No. 5, Summary for July 1, 1957 - June 30, 1958.	L. E. Tanner Illinois Inst. of Tech., Chicago. Armour Research, Foundation	7-29-58
BMI-1278	Survey of Ternary and Quaternary Metastable Gamma-Phase Uranium Alloys.	V. W. Storch, A. A. Bauer, R. F. Dickerson	7-15-58
DP-284	Corrosion by Solutions Containing HNO ₃ , HF, and Reducing Agents.	M. L. Holsworth	5-58
EW-51748	Fabrication Behavior of Some Uranium Dioxide Powders.	D. R. Stenquist, R. J. Anicetti	12-1-57
HW-54016	Transformation Kinetics of Beta Plutonium.	R. D. Nelson	12-4-58
RSC-928	Precipitation of Thorium as Thorium Hydride from Thorium-Magnesium Solutions.	P. F. Weernor, P. Chiodi Ames Lab., Ames, Iowa	8-57

LA-2225	Fabrication of Uranium Welding Rod.	E. L. Brundige, G. S. Hanks, J. M. Taub	9-9-58
MISC-1958-317	ARC-Cast Molybdenum-Base Alloys. Supplement to Summary Report.	M. Semchyshen, R. Q. Barr Climax Molybdenum Co. of Michigan, Detroit	1957
MISC-1958-320	Electric Microstructure of Corundum. Technical Report No. 10.	H. B. Vanfleet, G. S. Baker, P. Gibbs Utah. Univ., Salt Lake City	9-15-58
MISC-1958-325	Development of an Oxidation Resistant Columbian Alloy. Status Report for the Period April 16, 1958 - August 15, 1958.	R. Speiser Ohio State Univ. Res. Foundation, Columbus	8-18-58
NP-6897	Graphite Technology. Progress Report No. 8 for the Period June 1 to August 1, 1958.	Ill. Inst. of Tech., Chicago. Armour Res. Foundation	n.d.
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UCRL-8269	450-Mev/c K ⁻ and $\bar{p}$ Beams at the Northwest Target Area of the Bevatron Separated by the Coaxial Velocity Spectrometer.	N. Horwitz, J. J. Murray, R. R. Rose, R. D. Tripp	6-58
UCRL-8276	Radiation Exposures of Personnel at the 60-Inch Cyclotron.	P. F. McWalters, W. B. Jones, M. A. Kerr, R. F. Burton	5-58
UCRL-8278	Photosynthesis.	M. Calvin	6-58
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UCRL-8427	Unstable Particles as Targets in Scattering Experiments.	G. F. Chew, F. E. Low	8-21-58
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UCRL-8451 Abstract	A Radio-Frequency System for Extracting Particles From a Cyclotron.	W. F. Stubbins	9-58
UCRL-8459 Abstract	The Nuclear Spin of Iodine-130.	H. L. Garvin, T. M. Green, E. Lipworth	9-58
UCRL-8462 Abstract	K^- Absorption in Deuterium: Evidence for the Two-Step Process, $K^- + d \rightarrow (\Sigma^- + \text{Nucleon}) + \pi^- \rightarrow (\Lambda + \text{Nucleon}) + \pi^-$.	N. Horwitz, D. Miller, J. J. Murray, M. Schwartz, H. D. Taft	9-58
UCRL-8468 Abstract	K^- Interactions in a Hydrogen Bubble Chamber; Σ^- and Σ^0 Masses.	A. H. Rosenfeld	9-58
UCRL-8471 Abstract	Ranges of Heavy Ions in Emulsion.	H. H. Heckman, B. L. Perkins, F. M. Smith, W. H. Barkas	9-58
UCRL-8472 Abstract	Ionisation and Energy Loss of Heavy Ions in Emulsion.	W. H. Barkas, H. H. Heckman	9-58
UCRL-8474 Abstract	Nuclear Spin of Silver-103.	W. B. Ewbank, L. L. Marino, W. A. Nierenberg, H. A. Shugart, H. B. Silsbee	10-1-58

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UCRL-3981	Effect of Deuterium Oxide (Heavy Water) on Biological Systems.	E. L. Bennett, M. Calvin, O. Holm-Hansen, A. M. Hughes, K. K. Lonberg-Holm, V. Moses, B. M. Tolbert	3-58
UCRL-3982	The Radiation Sensitivity of Crystalline Choline Chloride.	R. M. Lemmon, R. O. Lindblom	4-58
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