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Lawrence Berkeley National Laboratory

Publication Date

1955-10-01

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Radiation Laboratory *7 u*
Berkeley, California

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LIST OF UNCLASSIFIED REPORTS RECEIVED AND ISSUED IN THE UCRL
INFORMATION DIVISION DURING THE PERIOD OF OCTOBER 1-15, 1955

October 17, 1955

Printed for the U. S. Atomic Energy Commission *4/5*

LIST OF CODES FOR REPORT NUMBERS

ACCO	-American Cyanimid Company
AEP	-Monsanto Chemical Company
ALCO	-American Locomotive Company
AMF	-American Machine & Foundry Co.
ANL	-Argonne National Laboratory
ANP	-Aircraft Nuclear Propulsion Project
APEX	-General Electric Company, ANP Project
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.
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 deNemour & 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)
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
UWFL	-University of Washington Applied Fisheries Laboratory
WAPD	-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 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 OCTOBER 1-15, 1955

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

October 17, 1955

<u>Index Number</u>	<u>Title</u>	<u>Author</u>	<u>Date</u>
	<u>BIOSCIENCES</u>		
AERE HP/R-1737	The Dose to the Trachea and Bronchi from the Decay Products of Radon and Thoron.	A. C. Chamberlain E. D. Dyson Gt. Brit. Atomic En. Res. Estab. Harwell, Berks, England	8-2-55
DP-129	Iodine Stack Monitor	B. M. Carmichael D. G. Karraker	8-55
KAPL-1313	Semiannual Progress Report of Radiological Development Activities in the Health Physics Unit, July-December 1954.		
NM 006 012.05.14	Stimulation of Erythropoiesis in Irradiated Dogs and Rats	F. Stohlman, E. P. Cronkite George Brecher Naval Med. Res. Inst. Bethesda, Md.	5-23-55
NM-Summaries of Research 1-1/6-30-55	Summaries of Research 1 January - 30 June 1955	Naval Med Res Inst., Bethesda, Md.	
USNRDL-TR-54	The Conversion of Glycine-1-C ¹⁴ to Protein-C ¹⁴ and C ¹⁴ O ₂ in Livers Slices from X-Irradiated Rats	R. E. Kay C. Entenman Naval Radiological Defense Lab. S. F.	8-1-55

CHEMISTRY

AERE C/R 1358	Pulse Analysis-A Discussion of Effects Important in the Radiochemistry of the Heavy Elements	K. M. Glover Gt. Brit. Atomic En. Research Estab. Harwell, Berks, England	1-24-55
AERE C/R 1586	The Electrical Double Layer	D. J. O'Connor same	6-20-55
AERE C/R 1641	A Modified Lathe for Turning Spectrographic Carbon Electrodes Used in the Cathode Layer Arc Method	A. V. Slatter S. R. Stitch same	3-55
AERE C/R 1651	A Calorimeter for Measuring Energy Deposition from Pile Radiation	A. R. Anderson R. J. Waite same	7-55
AERE HP/R 1585	A Differential Ionisation Chamber Method for Continuous Flow Monitoring of Tritium in Air in the Presence of a Significant Gamma Background and with occasional Traces of Radon in the Sampled Air	L. W. D. Pittendrigh J. E. Vousden same	12-6-54
AERE CE/R 1598	Spray Liquid-Liquid Extraction Columns, Prediction of Limiting Holdup and Flooding Rates	J. D. Thronton same	1-28-55
AERE Lib/Trans 534	The Lattice-Theoretical Calculation of the Energy of Imperfections in Simple Ionic Crystals/Trans. from Zeitschrift für Naturforschung <u>7A</u> 372-79 (1952). by Peter Brauer.	Gt. Brit. Atomic Energy, Res. Estab. Harwell, Berks, Eng.	1955
AERE Lib/Trans. 554	New Results on the Structure of Collagen By A. A. Tustanovskii, A. L. Zaides, G. V. Orlovskaya and A. N. Mikhailov. Trans. from Akademiia Nauk, SSSR. Doklady <u>97</u> , no. 1, 121-4 (1954).	same	1955

ANL-5482	The High Temperature, High Vacuum Vaporization and Thermodynamic Properties of Uranium Dioxide	R. J. Ackermann	9-14-55
BNL-358(T-66)	A High Pressure Proportional Counter for Fast Neutron Spectroscopy	S. D. Bloom E. Reilly B. J. Toppel	6-55
DP-76	Conductometric Acidimetry in the Presence of Hydrolyzable Ions	R. C. Propst	6-55
ISC-534	Kinetics of Chloride Exchange in Aqueous Chloride-Tetrachloroplatinate(II) System	L. F. Grantham D. S. Martin	6-54
Monograph 2418	Crystal Structure and Quadrupole Coupling of BrCn	S. Geller A. L. Schawlow Bell Telephone Labs. Inc. New York	5-55
Monograph 2476	The Crystal Structure of Rh Se ₂	S. Geller B. B. Cetlin same	5-10-55
NBS-4084	Improved Synthesis of Sodium D-Glucuronate-6-C ¹⁴ and of D-Glucose-6-C ¹⁴	R. Schaffer H. S. Isbell	5-29-55
NBS-4321	Fluorine Substitution in Hydrous Silicates and Related Minerals	A. Van Valkenburg C. R. Robbins G. M. Ugrinic	6-55
*NRL-Memo-470	Thermal and Related Physical Properties of Molten Materials. Progress Report No. 13 [For] February 1-April 30, 1955	B. E. Walker C. T. Ewing Naval Res. Lab. Wash. D. C.	5-20-55
*NYO-1594	Electrostatic Mechanisms in Fiber Filtration of Aerosols	A. T. Rossano, Jr. L. Silverman Harvard Univ. Boston. Air Cleaning Lav.	5-11-55
*Microcard			

*NYO-6682	Factors Affecting the Mechanism of Graphitization and the Heterogeneous Gas Reactions of Graphites. Quarterly Progress Report [for January 1, 1955 to March 31, 1955. [Part I. Carbonization and Graphitization. Part II. Heterogeneous Gas Reactions of Carbons. C. Gasification Rate Studies on Carbons at Low Temperatures.]	D. B. Murphy W. V. Kotlensky A. F. Armington Penn. Univ.	5-1-55
*OSR-TN-55-103	The Change of Length of Ionic Crystals Due to X-Ray Irradiation. Technical Report No. 3.	Lan-Ying Lin same	6-55
*RDB(C)/TN-131	The Oxidation of Lithium. Report of Progress to April 5, 1955	C. Tyzack P. B. Longton Gt. Brit. Culcheth Lab.	6-15-55
RMO-2018	Uranium Production Process Designs for Leached Zone Plants. Vol. VII. Ammonia, Nitric Acid and Ammonium Nitrate Plants	D. F. Clements W. B. Williams et al. Int. Min. and Chem. Corp.	9-53
*TEI-498	Determination of Thorium in Zircon	F. Cuttitta Geo. Survey	4-55
*TID-5146	Report on Vapor-Liquid Equilibria of Nitric Acid Solutions Containing Chloride Ion.	P. F. Hagerty A. N. Hixon Penn. Univ.	1953
TID-5280	Fourth Annual Symposium on Hot Laboratories and Equipment, Held in Washington, D. C., September 29 and 30, 1955		9-55

ENGINEERING

AERE Lib/Trans 561	New Results on the Temperature Distribution in a Boiler Water Pipe at Very High Pressures By M. A. Styrikovich and M. E. Shitsman. Trans. from Akademiia Nauk, SSSR. Doklady <u>96</u> , no. 1, 69-72 (1954).	Gt. Brit. Atomic En. Res. Estab. Harwell, Berks, Eng.	1955
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* Microcard

AERE Lib/Trans. 565	Investigation of Heat Exchange in the Boiling of a Liquid in Pipes By L. S. Stermann. Trans from Zhurnal Tekhnicheskoi Fiziki <u>24</u> , no. 11, 2046-53 (1954)	Gt. Brit. Atomic Res. Estab. Harwell, Berks, Eng.	1955
HE-150-131	Lift on Flat Plates in Low Density Supersonic Flow	D. M. Tellep Calif. Univ. Berkeley Inst. of Eng. Research	8-30-55

GEOSCIENCES

*ORO-138	An Investigation of the Chattanooga Black Shale of Tennessee as a Source of Uranium. Progress Report for July 1, 1954 to December 31, 1954.	Tenn. Univ.	1-3-55
*RME-2019	Geology of Black Dyke Prospect Sierrita Mountains, Pima County, Arizona.	R. L. Wells H. E. Puttuck Div. of Raw Materials Salt Lake Ex. Br. AEC	9-54
*RME-2026	Memorandum Report on the Uranium Occurrence at the Lulu Belle Claims, Gila County, Arizona.	R. L. Wells same	1-55
*RME-3020	Annual Report [for] April 1, 1954 to March 31, 1955	J. W. Gruner D. K. Smith, Jr. Minn. Univ.	4-1-55
*RME-3110(pt. II)	Annual Report [for] June 30, 1954 to April 1, 1955. Part II. Progress Report on the Minerals from the Delta Deposit, Emery County, Utah	P. K. Hamilton Columbia Univ.	5-55
*TEI-490	Geologic Investigations of Radioactive Deposits Semiannual Progress Report, June 1 to November 30, 1954.	Geological Survey	12-54

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METALLURGY AND CERAMICS

AERE C/R 1468	The Preparation of Plutonium Amalgam and Its Reaction with Dilute Hydrochloric Acid	A. G. White Gt. Brit. Atomic Energy Res. Etab. Harwell, Berks. Eng.	6-54
ANL-5367	Deformation Mechanisms of Alpha-Uranium Single Crystals	L. T. Lloyd H. H. Chiswik	12-14-54
BMI-283	Final Report on the Ammonium Carbonate Pressure Leaching of Uranium Ores Proposed as Feed to the Pilot Plant at Grand Junction, Colorado to Div. of Raw Materials, U. S. Atomic Energy Commission	F. J. Smit G. R. Smithson C. M. Wheller et al.	8-31-55
BRB-1	Fabrication of Zirconium "S" Rod Thimble Tubes	R. M. Treco G. T. Murray R. S. French	1-55
COO-207	A Study of the Mechanisms of Heat Treatment of Zirconium-Base Alloys; Report No. 2, Summary July 1, 1954 - June 30, 1955	Ill. Inst. of Tech.	8-3-55
HW-35807	The Calcium Fluoride-Magnesium Fluoride-Lithium Fluoride System	W. E. Roake	3-15-55
HW-35808	The Calcium Fluoride - Lithium Fluoride System	W. E. Roake	3-9-55
LA-1913	Studies on the Preparation, Properties, and Composition of Plutonium Peroxide	J. A. Leary	12-54
Monograph 2440	Factors Affecting Physical Structure of Dry Pressed Steatite	J. R. Fisher J. F. Potter Bell Telephone Labs Inc., New York	6-55

NMI-1137	Effect of Heat Treatment on the Corrosion Behavior of Zirconium Binary Alloys of Nickel and Iron	D. S. Kneppel	6-22-55
*NRL-Memo-424	The Solubility of Impurities in Metallic Sodium.	D. D. Williams J. A. Grand et al. Naval Res. Lab. Washington D. C.	2-1-55
NYO-4631	Study of Metal-Ceramic Interactions at Elevated Temperatures; Quarterly Progress Report for the Period Ending July 1, 1955	F. H. Norton W. D. Kingery Mass. Inst. of Tech. Cambridge	7-1-55
NYO-6327	Application of Chemical Thermodynamics to the Study of a Alloy Formation; Progress Report for April 1, 1955 to July 1, 1955	W. E. Wallace R. S. Craig et al. Pittsburgh Univ.	7-11-55
NYO-6450	The Measurement of Thermal Conductivity of Refractory Materials; Quarterly Progress Report for the Period Ending July 1, 1955	W. D. Kingery F. H. Norton Mass. Inst. of Tech. Cambridge.	7-1-55
NYO-6513	X-Ray Study of Radiation Damage	B. E. Warren same	7-20-55
NYO-6620	Electrochemical Studies of Non-Aqueous Melts; Quarterly Progress Report for Period Ending June 1, 1955	R. F. Mehl G. Derge Carnegie Inst. of Tech Pittsburgh Metals Research Lab.	8-55
NYO-7172	The Adaptation of New Research Techniques to Mineral Engineering Problems	Mass. Inst. of Tech. Cambridge, Dept. of Metallurgy	7-31-55

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*OSR-TN-55-159	Surface Activity Methods for the Determination of Diffusion Coefficients in Solids. Metallurgy Report No. 2.	R. H. Condit C. E. Birchenall Princeton Univ. N. J. Forrestal Res. Ct.	4-55
*RAE-TN-MET-205	The Slip Band Extrusion Effect in Cold Rolled Super Purity Aluminum.	C. A. Stubbington P. J. E. Forsyth Gt. Brit. Royal Aircraft Estab. Farnborough, Hants, England.	10-54
SO-2521	The Tensile Characteristics of Particle-Strengthened Alloys of Zirconium with Iron	J. H. Keeler	8-55
*TAM-83	Investigation of the Behavior of Overstrained Thickwalled Cylinders. Technical Report No. 3. The Overstraining of Medium-Carbon Steel Thick-Walled Cylinders.	M. C. Steele L. C. Eichberger Ill. Univ. Urbana	4-55
<u>PHYSICS</u>			
AD-56-356	Microwave Susceptibility Measurements in Ferites; Technical Report No. 70	J. O. Artman P. E. Tannenwald Mass. Inst. of Tech. Lincoln Lab, Lexington	10-27-54
AD-56-494	Development of X-band Traveling-Wave Tubes; National Defense Contract Scientific Report No. 2, for August-October 1954.	J. N. Lenker Fed. Telecom- munication Labs Inc., Nutley, N. J.	2-55
AD-56-607	Development of 100 Watt-Shf-Band-Traveling Wave Tube; Report No. 15, Covering Quarterly Period July 1, 1954 to September 30, 1954	W. W. Siekanowicz Radio Corp. of America	
*Microcard			

AEC-TR-1885 (Translation)	"The Influence of Binary Collisions on the Molecular Flow of Gases. I. Long, Cylindrical Tubes, " by J. W. Hiby and M. Pahl. Trans. from Zeitschrift für Naturforschung <u>7A</u> , 533-41 (1952). 21 p. Translated from German	
AEC-TR-1886 (Translation)	"The Influence of Binary Collisions on the Molecular Flow of Gases. II. Narrow Channels Between Flat Plates; Perforated Plates; Short Tubes; Porous Media, " by J. W. Hiby and M. Pahl. Trans. from Zeitschrift für Naturforschung <u>7A</u> , 542-53 (1952). 26p. Translated from German	
AEC-TR-2160	"Thermal Arcs of High Temperatures and Low Operating Voltage, " by G. Busz and W. Finkelburg Trans. from Zeitschrift für Physik <u>139</u> , 212-25 (1954). 13p.	
AECL-221	Papers Presented by AECL Staff at the Meeting of the Royal Society of Canada Held at Toronto June 6-8, 1955	Atomic Energy of Canada Ltd. Chalk River Project, Chalk River, Ont.
AECU-3054	Ozonosphere Observations from Propagation of Atomic Blast Waves	Jack W. Reed 6-1-55 Sandia Corp. Albuquerque, N. Mex.
AERE GP/R 1596	Resonant Cavity Perturbation Technique at 200 MCS.	J. H. Adlam 4-26-55 F. H. James Gt. Brit. Atomic En. Res. Estab. Harwell, Berks. England
AERE GP/R 1613	Design Notes on Resonators for Proton Linear Accelerators	J. J. Wilkins 3-21-55 same
AERE GP/R 1622	An S-Band Variable Attenuator for High-Power Working	B. E. Kingdon 4-26-55 same

AERE Lib/Trans. 504	On the Clarification of the Conception of the Eberhard Effect By Joseph Junkes. Trans. from Zeitschrift für wissenschaftliche Photographie, Photophysik und Photochemie <u>36</u> , No. 10 and 11, 217-34(1937)	Gt. Brit. Atomic Energy Res. Estab. Harwell, Berks. England.	1955
AERE N/R 1639	Delays in BF_3 Proportional Counters	K. B. Nicholson same	5-6-55
AERE NP/R 1667	Flux Measurements with the BF_3 "Long Counter."	W. D. Allen same	6-8-55
AERE X/R 1644	Non-Linear Effects in Electron Plasmas	P. A. Sturrock same	3-55
BNL-2422	Energy Distribution of K Mesons Produced in Nuclei	M. M. Block E. M. Harth et al.	
CERN-PS/AED-3	Site Survey	European Organization for Nuclear Research, Geneva.	9-55
CERN-PS/MM 20	Influence De La Forme Des Cycles D'Impulsions Sur Le Champ Remanent (Marquettes V, VI, VII).	same	
COO-172	Research in Nuclear Physics; Progress Report No. 5	Purdue Res. Foundation	6-15-55
K-1234	Calculation of Transient Load Stability of an Electrical System	J. E. Rowe	9-23-55
LA-1872	Table of $\sin^2 X$; $X = [0^\circ(0.001^\circ)45^\circ; 5D]$	R. M. Gilmer H. G. Kolsky	4-55
LA-1943	Rational Approximation of Functions	B. Carlson M. Goldstein	8-55

MISC 1955-163
(Translation)

"The Possibility of Occurance of μ^0 -Mesons Penetrating Radiation During Collisions between High Energy Protons and Nuclei," by A. N. Novikov, B. M. Pontekorvo (i. e. Pontecorvo) and G. I. Selinvanov. Trans. from a preprint from Akademiia Nauk, SSSR. 1955. 7p. Translated from Russian

MISC 1955-164
(Translation)

"Total Cross-Section of Negative π -Mesons and Deuterium Interactions in the 140 to 400 Mev Energy Region," by A. E. Ignatenko, A. I. Moukhin, E. B. Ozerov and B. M. Pontekorvo (i. e. Pontecorvo). Trans. from: Akademiia Nauk, SSSR. Doklady 103, no. 2, pp. 209-12 (1955). 6p. Translated from Russian

MISC-1955-165
(Translation)

"A Stochastic Method of Particle Acceleration," by E. L. Burshtein, V. I. Veksler, and A. A. Kolomenskii. 1955 4 p. Translated from: Akademiia Nauk, SSSR. "Certain Problems of the Theory of Cyclic Accelerators," Moscow, 1955, pp. 3-6.

MISC 1955-166
(Translation)

"Inelastic Scattering of 300 Mev π^- Mesons by Complex Nuclei," by N. A. Mitin and E. L. Grigorev. Trans. from Akademiia Nauk, SSSR. Doklady 103, 219-22 (1955). Translated from Russian.

MISC 1955-167
(Translation)

"The Derivation of Relations Between Cross Sections Which Follow from the Hypothesis of Isotopic Invariance," by I. Shmushkevich. Trans. from Akademiia Nauk, SSSR. Doklady 103, 235-38 (1955). Sept. 23, 1955. 8 p. Translated from Russian.

Monograph 2439

Stereophonic Sound Reproduction Enhancement Utilizing The Haas Effect

B. P. Bogert
Bell Telephone
Labs., Inc. N. Y.

6-55

Monograph 2444	Some Gyrator and Impedance Inverter Circuits	B. P. Bogert Bell Telephone Labs., Inc. New York	7-55
Monograph 2446	Pressure Dependence of the Resistivity of Silicon	W. Paul G. L. Pearson same	6-15-55
Monograph 2465	Silicon n-p-n Grown Junction Transistors	M. Tanenbaum L. B. Valdes et al. same	6-55
Monograph 2466	Intercity B-W and Color Television Transmission	J. M. Barstow same	3-55
Monograph 2473	Seebeck Effect in Silicon	T. H. Geballe G. W. Hull same	5-15-55
NAA-SR-1137	Absolute Thermal Neutron Determination Part II. Absolute Beta Counting of Indium Foils	R. L. Koontz M. A. Greenfield A. A. Jarrett	10-1-55
NAA-SR-1459	The Production of Atomic Displacements by High Energy Particles	J. A. Brinkman	10-15-55
NAVORD 3594	Shock Distances in Front of Symmetrical Bodies	W. H. Heybey Naval Ordnance Lab White Oak, Md.	12-24-53
NBS-3552	The Cryogenic Engineering Division's Vibration Laboratory; Technical Memorandum No. 35	E. H. Brown	9-15-55
NSF-TR-78 (Translation)	"Strong Perturbations of Natural Electromagnetic Oscillations in Nearly Cylindrical Regions," by Yu. S. Sayasov. Trans. from Akademiia Nauk, SSSR. Doklady <u>90</u> , 163-66 (1953). 4p.		

*NYO-7317	A Focusing Atomic Beam Apparatus: Theory and Design	A. Lemonick F. M. Pipkin et al. Princeton Univ. N. J. Palmer Physical Lab.	6-15-55
ONRL-64-55	Pisa Conference on Elementary Particles, June 12-18, 1955 Technical Report	A. Roberts Office of Naval Res., London	7-26-55
ONRL-66-55	Physical Society Meeting on High Energy Nuclear Physics, Liverpool, July 5-6 1955; Technical Report	A. Roberts same	7-29-55
ONRL-79-55	Cosmic Ray and Nuclear Physics Research in Northern and Central Italy; Technical Report	A. Roberts same	8-22-55
ORNL-1879	Physics Division Semiannual Progress Report for Period Ending March 20, 1955	A. H. Snell	10-3-55
ORNL-1928	Mathematics Panel Semiannual Report for Period Ending June 30, 1955	A. S. Householder W. C. Sangren	9-22-55
*OSR-TN-55-135	Deuteron Model Calculation of the High-Energy Nuclear Photoeffect. Technical Report No. 13.	K. G. Dedrick Stanford Univ.	5-55
*OSR-TN-55-165	A Model for Collision Processes in Gases. II. Small Amplitude Oscillations of Charged Two Component Systems.	E. P. Gross M. Krook Harvard Univ.	6-55
*RD(R)-8134	A General Formula for Upper Bounds for the Critical Size of a Reflected Mono-energetic System	R. T. Ackroyd United Kingdom Atomic Energy Auth. Ind. Grp. H. Q. Risley Lancs, England	12-6-54

*Microcard

*RD(R)-8135

On the Conjecture that Steiner Symmetrization
Reduces Critical Mass.

R. T. Ackroyd 4-26-55
J. M. Ball
United Kingdom
Atomic Energy
Auth. Indus. Grp
H. Q. Risley, Lancs,
England

*SUI-55-1

Gamma Rays from the Low Energy Proton
Bombardment of Beryllium

R. R. Carlson 1954
E. B. Nelson
Iowa State Univ.

*TPI-70

Graphs of Coulomb Functions

W. T. Sharp 7-29-53
H. E. Gove et al.
At. Energy of Canada
Chalk River Project
Chalk River, Ont.

*TPI-75

Algebraic Tables of Clebsch-Gordan
Coefficients

B. J. Sears 8-54
M. G. Radtke
same

UCLA-344

Radioargon Effluent from the Stack of the Medical
Research Reactor

M. A. Greenfield 9-26-55
A. Norman et al.

REACTOR SCIENCES

IOP-3

NRX Reactor Research Facilities; Facilities
Available, Design Requirements, Services
Available, Approved Instruments

At. Energy of 8-55
Canada, Chalk River
Project, Chalk River
Ontario

MISCELLANEOUS

AECU-3003

High Temperature Strain Gage Research,
Summary Report

F. G. Tatnall 1-25-55
Baldwin-Lima-
Hamilton Corp. Phil.

AECU-3066

Meteorology and Atomic Energy

Weather Bur. 7-55

*Microcard

AERE EL R 1616	Proceedings of the Applied Nucleonics Conference, Buckland House, 4th and 5th December, 1954	E. W. Pulsford Gt. Brit. Atomic Energy Res. Estab. Harwell, Berks, England.	3-55
ASTIA-U-89	Title Announcement Bulletin No. U-89	Armed Services Tech. Inf. Agency Dayton, Ohio	9-7-55
BNL-355(S-26)	Quarterly Progress Report, April 1-June 30, 1955; Unclassified Section.		
NACA-Research Abstracts No. 90	National Advisory Committee for Aeronautics Research Abstracts No. 90	National Advisory Committee for Aeronautics	9-27-55
*PA-TR-2092	Determination of Average Surface Diameter and Tapped Density of Powdered Pyrotechnic Ingredients.	B. Bubrow M. Nieradka Picatinny Arsenal Samuel Feltman Ammunition Labs Dover, N. J.	11-54
*RDB(W)/TN-206	A Liquid Metal Level Indicator Employing Gamma Radiation Techniques	A. P. Dixon Gt. Brit. Windscale Works, Sellafield, Cumb., England	5-55

LIST OF UNCLASSIFIED REPORTS ISSUED IN THE UCRL INFORMATION DIVISION

UCRL-2677	Preparation of Sodium Heptanoate-7-C ¹⁴	R. M. Noller	8-31-55
UCRL-3066	The Metabolism of the Lanthanons in the Rat	P. W. Durbin M. H. Williams M. Gee, et al.	7-55

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UCRL-3084	A Magnetometer for Measuring Fields to 300 Gauss	F. Voelker M. A. Leavitt	7-55
UCRL-3114	Elastic Scattering of 48-Mev Alpha Particles by Heavy Nuclei (Thesis)	R. E. Ellis	8-22-55
UCRL-3116	A Study of the Ge-GeO ₂ and Si-SiO ₂ Systems	P. Zavitsanos Leo Brewer	8-55
UCRL-3147	The Mass Ratio Method Applied to the Measurement of L-Meson Masses and the Energy Balance in Pion Decay	W. H. Barkas W. Birnbaum F. M. Smith	9-55
UCRL-3152	List of Unclassified Reports Received and Issued in the UCRL Information Division During the Period of September 16-30, 1955		1955