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UNIVERSITY OF CALIFORNIA

Radiation Laboratory
Berkeley, California

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

April 18, 1955

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
TID -U. S. Dept. of Interior, Geological Survey
UCLA -Technical Information Service, Oak Ridge
UR -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 APRIL 1 - 15, 1955

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

April 18, 1955

<u>Index Number</u>	<u>Title</u>	<u>Author</u>	<u>Date</u>
<u>BIOSCIENCES</u>			
*AD-19590	The Lithium Fluoride Thermoluminescent Dosimeter Progress Report No. 4	F.Daniels W.P.Riemen Wisconsin Univ.	7-1-53
*AD-22410	Dosimeter Charger (Radioactive). Quarterly Report [For] April 2, 1953 to June 30, 1953	M.J.Cohen Radiation Research Corp.	7-2-53
*AECU-206	Development of Continuous Jet Impaction Method for Determining Air-Borne Contaminants	L.Baurmash L.Curtis F.A.Bryan, et al Calif. Univ. Los Angeles	3-1-49
*AECU-2993	Health Hazards in Mist Cooling	H.F.Schulte Los Alamos	1954
A.E.R.E. EL/L 6	Radiac Instruction Course Quartz-Fibre Dosimeters and Chargine Units	F.B.Whiting	8-11-54
AERE-EL/M-58	A Personal Gamma Tolerance Dose Monitor with Audible Warning	D.E.Brown R.P.Henderson	10-18-51
AERE-EL/M-71	Gamma Ray Dosimetry by Chemical Methods. (Summarising Report on Investigations into Halogenated Hydrocarbon System)	A.M.Nicholls E.H.Willis	4-5-52
HW-35174 *Microcards	The Uptake and Translocation of Cesium by Plants	J.H.Rediske A.A.Selders	9-15-53

MISC 1955-45	Fifth Conference on Radiation Cataracts Abstracts and Proceedings	National Academy of Sciences and National Research Council	3-26-54
NYO-4917	Clinical Clearance Rate Measurements for the Accumulation of I ¹³¹ by the Thyroid Gland Part II. Clinical Evaluation	J.P.Storaasli W.J.MacIntyre H.L.Friedell, et al Western Reserve Univ. School of Medicine	3-18-55
USNRDL-TR-23	On The Nature of the Spleen-Bone Marrow Radiation Recovery Factor	L.J.Cole M.E.Ellis	12-13-54
UCLA-328	The Effect of Certain Environmental Factors on Mineral Uptake by Bean Plants: I. Phosphorus Uptake	W.L.Ehrler A.H.Lange K.C.Hammer Calif. Univ. Los Angeles School of Medicine	3-25-55
USNRDL-TR-25	Cyclotron Neutron and Gamma-Ray Dosimetry for Animal Irradiation Studies	E.Tochilin S.W.Ross, et al	11-1-54
USNRDL-TR-27	Adrenal Cortical Response in the Rat to X Irradiation in Terms of Corticosterone Levels	F.T.Brayer	1-17-55

CHEMISTRY

*AD-16020	Heats of Adsorption of Argon on a Series of Carbon Blacks Graphitized at Successively Higher Temperatures Technical Report No. 3	R.A.Beebe D.M.Young H. Bienes Amherst College	6-30-53
*AD-23431	Investigation of the Effect of Raw Material Production Variables on the Physical and Chemical Properties of Carbides, Nitrides, and Borides. Progress Report No. 9 for the Period September 1 to October 31, 1953	H.Blumenthal American Electro Metal Corp.	1953

*Microcards

*AECU-2992	The Kinetics of the Corrosion of Copper in Acid Solutions	J.R.Weeks G. R. Hill	12-15-54
AECU-3000	Corrosion of Zirconium I Surface Area Determination and Sample Preparation Study Part A. Chemical Properties of Zirconium Part B. Determination of Surface Area Changes on Zirconium Samples Part C. Investigation of Electro-Reduction Technique for Determining the Corrosion Rate of Zirconium	A.Burtron Johnson G.R.Hill Institute of Rate Processes Univ. of Utah	12-1-54
*AERE-C/R-1170	The Analysis of Silver-Zirconium Alloys	G.W.C.Milner J.L.Woodhead	5-6-53
*AERE-C/R-1241	The Corrosion of Copper by Elementary Fluorine (Interim Statement of Results)	P.E.Brown J.M.Crabtree J.F.Duncan	4-27-53
*AERE-EL/R-337	The Ultra-Violet Fluorimeter by Hilger and Watts Ltd.	C.N.Davey C.D.Florida	5-49
*AERE-EL/R-394	Alpha Particle Assay and the Measurement of the Thorium-Uranium Ratio in Radioactive Ores	H.D.Peirson	11-50
*AERE G/M-129	Intense Purification of Gases with Alkali Metals	E.R.Harrison	4-6-52
*AERE-G/M-134	Preparation of Indium Dibromide	E.R.Harrison	6-16-52
IDO-14316	Manual of Analytical Methods used by the Control Laboratory at the Chemical Processing Plant Part I	M.J.Shepherd Jr. J.E.Rein	1-31-55
ISC-584	Ames Laboratory Analytical Procedures for Determination of Impurities in Calcium Metal	C.V.Banks B.D.LaMont	3-7-55
K-1204	The Infrared Spectra and Molecular Structure of Selenium Hexafluoride and Tellurium Hexafluoride	T.G.Burke	3-17-55
MISC 1955-52	Technical Report 1953 - 1954 Part Two (Part one recorded as MISC 1954-101)	Lab. of Molecular Structure and Spectra, Univ. of Chicago	
*Microcards			

MLM-909	A Modified Joliot Apparatus for the Study of Electrodeposition of Polonium (Information Report)	W.H.Power	10-28-53
MLM-1002	Radiochemically Pure Cerium (Information Report)	M.L.Salutsky H.W.Kirby	8-20-54
*MR-538	Colorimetric Determination of Silicon in Titanium Alloys	M.Codell C. Clemency G.Norwitz Pitman-Dunn Labs., Frankford Arsenal	2-53
*NP-5024	Reports on Boron Compounds. (Abstract Bulletin U5)	Library of Congress Tech. Info. Div.	2-9-55
NYO -7006	Thermodynamics of Metal Solutions Technical Progress Report	M.B.Bever P.Greenfield G.Scatchard, et al Mass. Inst. of Tech.	3-1-55
*ORO-135	Mass Transfer in a Horizontal Liquid-Liquid Extraction Tube	N.F.Murphy J.E.Lastovica A.E.Skrzec Virginia Polytechnic Inst.	1954
WASH-512	Visit to Chalk River as Part of Joint Study of Highly Irradiated Plutonium, AEC 43/799	R.P.Schuman Knolls Atomic Power Lab.	2-4-55

ENGINEERING

*AERE-E/R-452	The D.C. Electromagnetic Pump for Liquid Metals	J.Woodrow	12-49
K -1187	Velocity and Pressure Distributions in Turbulent Pipe Flow with Uniform Wall Suction	H.L.Weissberg	3-29-55
*NACA-TN-3266	Experimental Evaluation of Momentum Terms in Turbulent Pipe Flow	V.A.Sandborn	8-27-54
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GEOSCIENCES

*AD-29189	Height and Geographical Distribution of the Oxygen Isotopes. Final Report	M.Dole D.P.Rudd D.A.Zaukelies, et al Northwestern Univ.	1-1-54
*AERE-EL/R-1204	Some Cold Cathode Valve Circuits Used in the Measurement of Radioactivity	D.H.Peirson	3-53
*RME-2011	Preliminary Report on the Uranium Occurrence of the Jeep No. 2 Claim, Clark Mountain Mining District, San Bernardino County, California	R.L.Hillier Div. of Raw Materials, AEC	6-54
*RME-3102	Some Stratigraphic, Sedimentary, and Structural Relations of Uranium Deposits in the Salt Wash Sandstone. Final Report - - April 1, 1952 to June 30, 1954	W.L.Stokes Utah Univ.	9-54
*TEM-443A	Trace Elements Reconnaissance Investigations In New Mexico and Adjoining States in 1951	G.O.Bachman C.B.Read Geological Survey	10-52

METALLURGY AND CERAMICS

*AD-22087	Investigation of the Effect of Atmosphere Reaction on The Deterioration of Metals at Elevated Temperatures. Final Report	O.C.Shepard Stanford Univ. School of Mineral Sciences	7-30-53
*AD-26044	Cast Nickel-Base Heat-Resisting Alloys. Final Report	R.S.DeFries E.E.Reynolds W.W.Dyrkacz Allegheny Ludlum Steel Corp.	10-15-53
*AD-26731	Investigation of Molybdenum and Molybdenum-Base Alloys Made by Powder-Metallurgy Techniques. Summary Report for the Period June 1, 1951 to June 30, 1953	W.L.Bruckard C. M. Craighead R.I.Jaffee Battelle Memorial Inst.	6-30-53

*Microcards

*AD-27424	Radiation Sensitive Glasses. Final Report For June 1952 to August 1953	R.Estin D.Kazen L.Marchi, et al Armour Research Foundation	11-23-53
*AD -27864	Wrought and Cast High Temperature Alloys. Progress Report No. 2 For June 16, 1953 to September 15, 1953	R.R.MacFarlane R. S. DeFries E.E.Reynolds, et al Allegheny Ludlum Steel Corp.	9-53
*AD-28937	A Study of a Family of Laves-Type Intermediate Phases. Quarterly Report No. 3 for September 1, 1953 - November 30, 1953	R.P.Elliott W.Rostoker D.J.McPherson Armour Research Foundation	12-23-53
*AD-33442	Investigations of Rhenium. Quarterly Progress Report No. 7 for the Period December 23, 1953 to March 22, 1954	C.T.Sims D.N.Gideon D.M.Rosenbaum, et al Battelle Memorial Inst.	3-22-54
*AD-43232	Intermediate Temperature Creep and Rupture Behavior of Titanium and Titanium Alloys. Quarterly Progress Report No. 7 for April 15, 1954 to July 14, 1954	J.V.Gluck J.W.Freeman Engineering Research Inst., Univ. of Mich.	7-14-54
*AECU-2990	Recent Progress in Solid-State Physics--Nuclear Engineering and Manufacturing	North American Aviation, Inc.	
*AERE-EL/M-49	Argon ARC Welding of Aluminum. (Revised Version of AERE-EL/M-28)	F. Wade	9-49
BMI-986	Effect of Radiation on the Thermal Conductivity of Uranium-1.6 w/o Zirconium	H.W.Deem M.Pobereskin E.C.Lusk	3-16-55
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*BM-RI-5107	Chromium-Base Alloys	R. G. Nelson H. G. Anderson Bureau of Mines	1-55
HW-33881	The Galvanic Corrosion of Aluminum	C.Groot	1-6-55
NBS REPORT 3522	Technical Memorandum No. 31 on Research and Development Joining Aluminum to Stainless Steel	M.C.Smith D.D.Rabb	3-10-55
*NP-5518	Status Bulletin No. P8 on Unclassified Titanium Research and Development of Army Ordnance Corps	Metallurgical Advisory Committee on Titanium	2-53
*NP-5519	Status Bulletin No. P9 on Unclassified Titanium Research and Development of Army Ordnance Corps	Metallurgical Advisory Committee on Titanium	5-53
*NP-5520	Status Bulletin No. P10 on Unclassified Titanium Research and Development of Army Ordnance Corps	Metallurgical Advisory Committee on Titanium	8-53
*NP-5521	Status Bulletin No. P11 on Unclassified Titanium Research and Development of Army Ordnance Corps	Metallurgical Advisory Committee on Titanium	11-53
*NP-5522	Status Bulletin No. P12 on Unclassified Titanium Research and Development of Army Ordnance Corps	Metallurgical Advisory Committee on Titanium	2-54
*NP-5523	Status Bulletin No. P13 on Unclassified Titanium Research and Development of Army Ordnance Corps	Metallurgical Advisory Committee on Titanium	5-54
*NP-5524	Status Bulletin No. P14 on Unclassified Titanium Research and Development of Army Ordnance Corps	Metallurgical Advisory Committee on Titanium	8-54

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*NP-5528	Periodic Status Report No. 10 For Period November 1954- January 1955. I. Deformation Studies of Metals at Elevated Temperatures. II. The Iron-Chromium-Nickel Ternary System. III. Effect of Structure and Composition of the Strength Properties of Stainless Steel. IV. Effect of Cold Work on the Strength Properties of Stainless Steels	N.J.Grant H.C.Chang P.E.Price, et al Mass. Inst. of Tech.	1955
*NP-5529	Increasing the Ratio of Modulus of Elasticity to the Density of Titanium Alloys. Quarterly Report No. 1 for March 15 - June 15, 1954	W.H.Graft W.Rostoker Armour Research Foundation	7-28-54
*NP-5530	Increasing the Ratio of Modulus of Elasticity to the Density of Titanium Alloys. Quarterly Report No. 2 for June 15, 1954-September 15, 1954	W.H.Graft W. Rostoker Armour Research Foundation	10-18-54
*NP-5531	The Effect of Microstructure on the Mechanical Properties of Titanium Alloys. Interim Report No. 4 Heat Treatment and Mechanical Properties of Titanium- Molybdenum Alloys	F. C. Holden H. R. Ogden R. I. Jaffee Battelle Memorial Inst.	12-1-54
NRL-4483	Slip Casting of Barium Titanate	J.F.Murray	2-18-55
SO-2039	Twenty-Fifth Quarterly Report (Progress Report Number 42) Fundamental Research in Physical Metallurgy	J.H.Hollomon D. Turnbull	4-5-55
* S & T Memo- 6/54	Report on the Tungsten Argon-ARC Welding of Magnesium- Zirconium Alloys. An Investigation into the use of Magnesium-Zirconium Alloys in Sheet and Plate Form.	Bristol Aeroplane Co., Ltd. (England)	4-54
* S & T Memo- 13/54	Report on Progress in the Development of an Alloying Theory of Titanium. (Progress Report 1951 - 1954 of the Titanium Research Programme)	Birmingham Univ. (England)	11-54
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* S & T Memo- 14/15	Diffusion of Solute Elements in Titanium	D.H.Tomlin A. J. Mortlock Reading Univ., Reading, Berks (England)	11-54
SO-2038	Self-Diffusion in Dilute Binary Solid Solutions	R.E.Hoffman D.Turnbull E.W. ^H Hart General Electric Research Lab.	3-55
*WADC-TR-53-184	Fatigue Prediction by Means of the Cyclograph	R.L.Cavanagh Ontario Research Foundation (Canada)	11-53
*WADC-TR-53-190 (pt. 2)	New High-Temperature Intermetallic Materials	W.Arbiter American Electro Metal Corp.	11-53
*WADC-TR-54-205	Development of Improved Titanium-Base Alloys	Battelle Memorial Inst.	8-54
*WAL-401/216	[Metals for Lightweight Construction.] An Investigation of the Mechanical Properties and Structure of Alloy welds Deposited in "Unalloyed" Titanium Base Metal	C.E.Hartbower D.M.Daley, Jr. Watertown Arsenal Lab.	2-19-54

PHYSICS

*AD-12123	Geiger Counters. A Review of Time-Lag Measurements in Geiger Counters. Report No. 141.04	J.Agresta New York Univ. Coll. of Engineering	1953
*AD-14076	Air Ionization Gauge (Dual Ionization Gauge). Final Research Report for October 1, 1952 to November 30, 1952 Report No. 390-8	F.R.Banks, Jr. Vacuum-Electronic Engineering Co.	2-27-53

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*AD-16317	Aluminum Powder Metallurgy. Quarterly Progress Report No. 2	A.B.Backensto, Jr. F.V.Lenel Powder Metallurgy Lab., Rensselaer Polytechnic Inst.	6-8-53
*AD-19099	Investigations on Utilization of Radiactive Energy As A Source of Battery Power. Fourth Quarterly Progress Report for May 1, 1953 to July 31, 1953	A.Thomas Tracerlab, Inc.	
*AD -19236	On the Nuclear Magnetic Resonance in Metals and Alloys Technical Report No. 186	N.Bloembergen T.J.Rowland Cruft Lab., Harvard Univ.	8-20-53
*AD-28429	Electrical Losses in Ceramic-to-Metal Seals	E.W.Ernst O.T.Puri Electrical Eng. Research Lab., Eng. Exp. Station, Univ. of Illinois	2-54
AEC-TR-1953	"Pulse Generator of Neutrons." [Translation]	E. Gatti G. Perona S. Persano	
AECU-2995	Electron Orbits in the Buncher of a Linear Accelerator Technical Report	E.A.Smars Microwave Lab. Stanford Univ.	12-54
*AERE-EL/M-39	Rise Times of Pulses from Proportional Counters Type 1077B	P.Holton J. Sharpe	3-50
*AERE-EL/M-61	A Method of Manufacturing Wire Loop Anodes for Proportional Counters	P. Holton	11-23-51
*AERE-EL/M-62	A Pulse Amplifier for use With a Low Background Proportional Counter	R.O.Williams A. B. Gillespie	1-52
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*AERE-EL/M-72	A Suggested Decay Scheme for Rh 106	R.B.Owen	4-24-52
*AERE-EL/R-368	Analysis of the Transient Response of Amplifiers with Shunt Feed Back	C.D.Florida	8-49
*AERE-EL/R-385	Two Metre Linear Accelerator	L.B.Mullett	8-9-49
*AERE-EL /R-1188	The Application of Multiplier Photocells to Scintillation Counting	R.B.Owen	5-11-53
*AERE-G/M-100	The $^{12}\text{C}(\gamma, 3\alpha)$ And $^{16}\text{O}(\gamma, 4\alpha)$ Reactions at Gamma-Ray Energies up to 40 Mev.	F. K. Goward J. J. Wilkins	
*AERE-G/M-143	Multiple Traversal of Targets in the Harwell Cyclotron at 600 Amperes Magnet Current	J. M. Dickson	10-52
*AERE-GP/R-1129	The System of Stereoscopic Photography and Reprojection used with the Harwell 18 Inch Diffusion Cloud Chamber	H. C. Whitby	3-53
*AERE-Memo-G/M-82	A Hard Valve Cloud Chamber Control Circuit	G. F. Snelling E. W. Titterton, et al	5-8-51
*CERN-BS-16	Measurement of Ionization	M.D. Corte	12-15-54
CERN-PS/ER 40	On Pole Profiles Yielding Linear Fields		1-55
CERN-PS/MM 10	Aimant AC III 1/Surface mediane. 2/Champ de fuite en dehors de l' aimant. Influence des positions des bobines. Irregularite du champ remanent, Caracteristique du fer.		1-55
CERN-PS/MM 11	Nodele AC III		1-55
CERN-PS/PD-3	Principe De Montage D'un Mesureur De Champ Employant Un Fil De Bismuth Comme Parite Sensible		2-55
*CERN/T/AET-1	Report on Research Work with the Cyclotron at Gustaf Werner's Institute for Nuclear Chemistry in Uppsala	A. E. Taylor	5-5-53
*Microcards	During the Period From April 1 to April 30, 1953		

*CERN/T/AET-2	Report on Research Work with the Cyclotron at Gustaf Werner's Institute for Nuclear Chemistry in Uppsala During the Period From May 1 to June 15, 1953	A. E. Taylor	6-17-53
*CERN/T/AET-3	Report on Research Work with the Cyclotron at Gustaf Werner's Institute for Nuclear Chemistry in Uppsala	A. E. Taylor	7-6-53
*CERN/T/AET-4	Report on Research work with the Cyclotron at Gustaf Werner's Institute for Nuclear Chemistry in Uppsala	A. E. Taylor	9-30-53
*CERN/T/AET-5	Internal Beam Measurements and the Deflection Protons from the Gustaf Werner Institute Cyclotron	A. E. Taylor	9-30-53
*CERN/T/CF-1	On the Equations of Motion of Particles Moving in the Alternative Gradient Proton Accelerator	C.Fronsdal	1952
*CERN/T/GL/3	Remarks on a Manuscript by J.D.Lawson	G. Lüders	12-52
*CERN /T/LM-2	Confrontation De L'Hypothese De L'Interaction Universelle De Fermi Avec L'Experience. (Comparison of the Hypothesis of the Universal Fermi Interaction with Experiment)	L.Michel	6-53
*CERN/T/TS-2	Betatron Oscillations in the Strong Focussing Synchrotron	T.Sigurgeirsson	12-52
*CERN/T/TS-3	Focussing in a Synchrotron with Periodic Field Perturbation Treatment	T.Sigurgeirsson	5-53
CRP-584	The Elastic Scattering of Charged Particles by Nuclei	A.J.Ferguson Chalk River, Project (Canada)	8-54
*CX-14	The Cooling of a Gas by Radiation	E.Bauer Ta-You Wu Institute of Mathematical Sciences, New York Univ.	4-54
DP-110	SRP Scintillation Counters	C. A. Prohaska	3-55
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DP-111	Miniature Ion Chamber for High Gamma Fields	A.C.Lapsley	3-55
IDO-16115	The Reflectivity of NaCl and Be Crystals for Slow Neutrons	M.W.Holm	3-24-55
LA -1867	A Method for the Numerical Solution of Transient Hydrodynamic Shock Problems in Two Space Dimensions	H.G.Kolsky	9-27-54
LA-1878	The Model 250 Amplifier	C.W.Johnstone	2-55
MISC 1955-52	Technical Report 1953 - 1954 Part Two (Part one recorded ad MISC 1954-101)	Lab. of Molecular Structure and Spectra, Univ. of Chicago	
MLM-871	Gamma Radiation from Polonium Neutron Sources (Information Report)	M.R.Hertz R.J.Breen	7-17-53
Monograph 2353	Some Recent Advances in Microwave Tubes	J.R.Pierce	12-54
Monograph 2354	Large-Signal Behavior of Junction Transistors	J.J.Ebers J.L.Moll	12-54
Monograph 2365	Distribution of a Sum of n Sine Waves	S.O.Rice	1-55
Monograph 2383	Large-Signal Transient Response of Junction Transistors	J.L.Moll	12-54
Monograph 2384	Miniature Lacquer Film Capacitors	D.A.McLean H.G.Wehe	12-54
*NACA-TN-3264	Study of the Mementum Distribution of Turbulent Boundary Layers in Adverse Pressure Gradients	V.A.Sandborn R.J.Slogar	8-10-54
*NDA-Memo-15C-63	Photoneutron Production from C^{13}	H.Goldstein	1-13-54
*NP-5515	Cosmic Rays. Technical Report No. 19 The Estimation of the Energy of Photon Induced Showers (Thesis)	P.A.Bender Univ. of Wash. St.Louis	1-24-55

*Microcards

*NP-5527	The Nature and Interactions of High Energy Fundamental Particles. Technical Report No. 1 [Covering Period] June 8, 1951 to July 31, 1954	R.W.Thompson Indiana Univ.	1954
NYO-6549	A Note on Deuteron Reactions and the j - j Coupling Shell Model	J.B.French B.J.Raz Rochester Univ.	3-19-55
*NYO-6668	An Energy Control for External Cyclotron Beams	G.Schrank Palmer Physical Lab.Princeton Univ.	1-14-55
*OSR-TN-55-42	Lattice Space Quantization of Coupled Meson and Nucleon Fields	D.H.Holland Stanford Univ.	1-55
*PD-195	Relative Accuracy in Comparing the Cross-Section of Uranium and Graphite Samples by the Swing Method	F.J.M.Farley National Research Council of Canada Div. of Atomic Energy	8-6-46
PR-P-24-E	Progress Report October 1, to December 31, 1954 Electronics Branch	J.Hardwick Atomic Energy Project (Canada)	
*WADC-TR-53-211	Effects of Atomic Weapons on Aircraft Systems. Temp-tapes: Improved Design, Construction, and Calibration	A.Ambrosio B.Bussell Calif. Univ. Los Angeles	7-53

REACTOR SCIENCE

KAPL-1138	The Effect of Positive Temperature Coefficients on Reactor Stability and Reactor Transfer Function	R.Siegel H.Hurwitz, Jr.	5-1-55
*NDA-10-96	A Multigroup Approximation to the Boltzmann Equation for Critical Reactors	E.Greuling F.Clark Nuclear Dev. Associates, Inc.	
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*WAPD-TN-505	Investigation of the Integral Transport Equation	H. Resnikoff D. Schiff	12-54
<u>MISCELLANEOUS</u>			
*AD-42465	Apparatus for Investigating Particle-Size Distribution of Aerosols. Progress Report for July [1953]	J. L. Hammond, Jr. A. E. Williamson, Jr. A. L. Thomas, Jr. Southern Research Inst.	8-25-53
*AD-42466	Apparatus for Investigating Particle-Size Distribution of Aerosols. Progress Report for March [1954]	A. L. Thomas, Jr. Southern Research Inst.	5-21-54
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*AERE-E/M-71	Kinney Vacuum Pump Maintenance	D. M. Norris E. A. Hampshire	6-9-53
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