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August 16, 1956

LIST OF UNCLASSIFIED REPORTS RECEIVED AND ISSUED BY THE UCRL
INFORMATION DIVISION DURING THE PERIOD OF AUGUST 1-15, 1956

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

August 16, 1956

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*Microcards			

*AECD-3930	Structural Target Damage Accompanying Sudden Loss of Vacuum	J.P.Frankel Calif. Research and Dev. Co.	8-24-51
*AECD-3931	Energy per Fission and Power of the Bulk Shielding Reactor	J.L.Meem E.B.Johnson H.E.Hungerford Oak Ridge	5-12-53
*AECD-3966	The Metal-Dielectric Junction of High-Voltage Insulators in Vacuum Magnetic Field	M.J.Kofoed R.S.Alger D.Graves Tenn. Eastman Corp.	8-8-45
AECU-3123	Small-Scale Automatic Field-Data Reduction System	A.V.Robnett E.J.Vulgan Sandia Corp.	10-3-55
AECU-3129	Development of High-Power Modulators with Low-Voltage Components	C.B.Jones R.B.Neal Stanford Univ.	12-55
AECU-3138	Electronic Devices for Nuclear Physics. Quarterly Report No. 21 for August 1, 1955 - October 31, 1955	R.H.Anderson G.O.Fowler M.H.Greenblatt David Sanoff Research Center, Princeton, N.J.	5-56
*AERE-RP/M-27	Perturbation Theory Calculations for Zephyr. Part II. Critical Mass	J.J.Syrett	1-1-54
*AERE-RP/M-33	Empirical Formulae for the Estimated Critical Mass of U235 or Pu239 in a Fast Reactor	J.Codd J.Egerton A.L.Pope	3-3-54
*AERE-RP/M-35	The Change in Reactivity During Operation of U ²³⁵ Fast Reactors	J.Codd J.Egerton	3-3-54

*Microcards

*AERE-RP/M-36	The Effect of a Gap Between the Core and Reflector of a Fast Reactor	J.Codd J.Egerton	3-8-54
*AERE-RP/M-54	Power and Temperature Transients in the Dounreay Fast Reactor Due to Coolant Velocity Changes	J.Codd	1-10-55
*AERE-RP/M-64	The Effect of Creating a Gap Between the Core and Reflector of a Fast Reactor by the Removal of Core Materials	K.C.Hines	5-5-55
*AERE-RP/R-1682	Activation Cross Sections in Zephyr	R.M.Absalom M.U.Lea	6-2-55
ANL-5567	Neutron Scattering Angular Distribution	A.Langsford, Jr. J.E.Monahan	6-56
APEX-233	Summary of the GE-ANP Reactor Machine Computation Program	D.S.Selengut Aircraft Nuclear Prop. Program	4-6-55
BNL-400	Neutron Cross Sections; Angular Distributions	D.J.Hughes R.S.Carter	6-56
BNL-2857	Observation of Long-Lived Neutral V Particles	K.Lande E.T.Booth J.Impeduglia, et al	1956
DP-163	Neutron Age in Mixtures of Light and Heavy Water	J.W.Wade	6-56
ISC-647	A Possible Method for Beam Extraction from an Alternating Gradient Synchrotron	L.R.McMurray D.J.Zaffarano	11-28-55
ISC-685	Measurement of Magnetic Field Gradients by the Hall Effect	R.D.Redin G.C.Danielson	12-55
K-1294	High Sensitivity Preamplifier for Line Recorder Mass Spectrometer	T.J.Lewis	7-27-56
*Microcards		Oak Ridge Gaseous Diffusion Plant, Tenn.	

KAPL-1531	One-Space-Dimensional Multigroup for the IBM 650. Part II. Machine Program	V.A.Walbran	4-10-56
MISC 1956-192	NRL Quarterly on Nuclear Science and Technology. Progress Report for the Period April - June 1956	Naval Research Lab., (Washington, D.C.)	7-1-56
MISC 1956-197	Observations of the Production and Decay of Unstable Particles in Emulsions, by V.V.Al'pers, R.I.Gerasimova, I.I.Gurevich, A.P.Mishakova and L.V.Surkova. Trans. from Akademiia Nauk, SSSR. Doklady <u>105</u> , 236-9 (1955)		
MIT-SSMT-QPR-21	Quarterly Progress Report No. 21		7-15-56
MIT-SSMT-TR-8	Notes on Group Theory. Technical Report No. 8	G.F.Koster	3-1-56
Monograph 2596	Transport and Deformation-Potential Theory for Many-Valley Semiconductors. Reprinted from Physical Review <u>101</u> , 944-61 (1956)	C.Herring E.Vogt	6-56
Monograph 2605	A Double-Slab Ferrite Field Displacement Isolator at 11 KMC. Reprinted from Institute of Radio Engineers, New York. Proceedings <u>44</u> , 554-5 (1956)	S.Weisbaum H.Boyet	6-56
NAA-SR-1535	Buckling of Graphite Moderated Lattices Containing Seven Rod Fuel Clusters	F.L.Fillmore	8-1-56
NAA-SR-1546	Intracell Flux Distributions for an Extensive Series of Heavy Water, Uranium Rod Lattices	O.W.Heinzman S.W.Kash	8-1-56
NAA-SR-1567	Control Rod Evaluation by Means of Perturbation Theory	F.L.Fillmore	7-15-56
NAA-SR-1580	Threshold Displacement Energy in Nickel	H.M.Kenworthy H.H.Neely	8-1-56

*Microcards

NAA-SR-1591	Low-Temperature Thermal and Electrical Conductivity of Graphite. II. Interpretation	J.E.Hove A.W.Smith	8-1-56
NAA-SR-1598	The Diffusion of Helium in Thorium and Uranium	A.Andrew C.R.Davidson L.E.Glasgow	7-15-56
NBS-3592	Second Annual Report of the Boulder Laboratories for July 1, 1955 to June 30, 1956		
ORNL-2101	The Effective Resonance Integral of U ²³⁸ Metal	L.Dresner	8-2-56
ORNL-2133	On Pseudo-Inverses of Linear Transformations in Banach Spaces	R.D.Sheffield	8-2-56
*TEI-127	The Preparation of Nuclear-Track Plates and Stripping Films for the Study of Radioactive Minerals	L.R.Stieff T.W.Stern Geological Survey	8-50
*TID-5029	Temperature Effect in D ₂ O Uranium Lattices	A.T.Biehl E.R.Cohen North American	1951
WAPD-15(Del.)	A Simplified Theory of Neutron Attenuation and its Application to Reactor Shield Design	R.D.Albert T.A.Welton	11-30-50

REACTOR SCIENCE

NAA-SR-1622	Sodium Graphite Reactor Quarterly Progress Report for January - March, 1956	L.E.Glasgow J.C.Cochran	7-15-56
ORNL-2090	A Philosophy of Control-System Design	E.P.Epler	7-27-56
*TID-5048	Initial Experiments on the Brookhaven Reactor. Part I.	J.Chernick Brookhaven	3-7-49
*TIP-5072	High-Speed Photography in Reactor Mechanism Development	P.R.Forgrave G.A.Waldie R.M.Conklin Battelle	1952
*Microcards			

TID-7506(Pt.I)

Papers Presented at the Technical Briefing Session on the Boiling Water Reactor Program and the Fast Reactor Program Held at Idaho Falls, Idaho, November 1-2, 1955

Argonne

7-56

MISCELLANEOUS

ANL-5605

Additions to the Library Report for the Period July 16-31, 1956. Technical Reports and Books

P.A.Schulze

BNL-388

Quarterly Progress Report for January 1 - March 31, 1956

MISC 1956-58
Vol 6-Nos.2&3

Isotopics. Announcements of the Isotopes Extension Division of Civilian Application. Vol 6 - Nos. 2 and 3

Div.of Civilian 7-56
Application. Isotopes
Extension, AEC

MISC 1956-196

Soviet Science in the Post-Stalin Era. Reprinted from American Academy of Political and Social Science, Philadelphia. Annals 303, 139-51 (1956)

J.Turkevich 1956
Princeton Univ.

Monograph 2630

An Over-All Quality Assurance Plan. Reprinted from Industrial Quality Control, 12, no. 3. 32-7 (1956)

E.G.D.Paterson 8-56

NACA-Abstract #104

Research Abstracts and Reclassification Notice No. 104

8-3-56

*WASH-645

Report of Official Visit to AERE., Harwell, England. August 1955

R.B.Day
Los Alamos

3-5-56

*WASH-647

Report on Discussions Held with Representatives of the U.K. Atomic Energy Authority, March 7, 8, 9, 1956

C.Starr 4-2-56
Atomics International
Div., North American Avia.

*WIAP-M-18

Permissible Fuel Costs with Reprocessing

J.M.Stein 5-20-53

LIST OF UCRL TRANSLATIONS ISSUED IN INFORMATION DIVISION

UCRL-Translation 264 (L)

Studies of Photographic Blackening Produced by X-Rays. Parts I, II, III and IV, by H.Tellez-Plasencia. Trans. from Science et Industries Photographiques, Ser. 2, 24, 1-21 (1953) 25, 41-50; 225-30; 425-32 (1954)

*Microcards

UCRL-Translation 281

The Secondary Emission of Antimony-Cesium Cathodes, by B.I. Dyatlovitskaya (i.e., Diatlovitskaia). Trans. from Akademiia Nauk, SSSR. Doklady 63, 641-4 (1948)

LIST OF UNCLASSIFIED REPORTS ISSUED BY THE UCRL INFORMATION DIVISION

UCRL-3395	Spallation-Fission Competition in the Nuclear Reactions of Plutonium Induced by Alpha Particles (Thesis)	R.J.Carr	4-15-56
UCRL-3412	Experiments on Polarization in Scattering Deuterons from Complex Nuclei and in Proton-Proton Scattering (Thesis)	J.A.Baldwin, Jr.	5-11-56
UCRL-3415	Chemistry Division Quarterly Report March, April, May 1956		6-5-56
UCRL-3434	Scintillation Detection of Very-Low-Energy Gamma Rays	J.C.Hubbs W.A.Nierenberg	6-4-56
UCRL-3438	Radioactivity of Neutron-Deficient Rubidium Isotopes (Thesis)	W.O.Doggett	6-12-56
UCRL-3441	Probabilities of Prompt-Neutron Emission from Spontaneous Fission (Thesis)	D.A.Hicks	6-13-56
UCRL-3448	The New Isotope Einsteinium-248	A.Chetham-Strode L.W.Holm	6-28-56
UCRL-3449	π^0 Modes of Heavy-Meson and Hyperon Decay(Thesis)	J.E.Osher	6-22-56
UCRL-3454	Disconnecting "Hot" Hose Lines	H .P.Cantelow	6-26-56
UCRL-3470	Analysis of V-Particle Decays at Bevatron Energies (Thesis)	B.H.Armstrong	7-56
UCRL-3482	Note on the Associated Production of Hyperons and K Mesons	S.Barshay	8-56
UCRL-3485	List of Unclassified Reports Received and Issued by the UCRL Information Division During the Period of July 16-31, 1956		8-7-56