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INDEX OF REPORTS AND PUBLICATIONS

BY THE UNIVERSITY OF ROCHESTER ATOMIC ENERGY PROJECT

by:

Eleanor B. Jones

Submitted by: Henry A. Blair,
Director

Date of Report: 12/8/52

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INDEX OF REPORTS AND PUBLICATIONSBY THE UNIVERSITY OF ROCHESTER ATOMIC ENERGY PROJECT

This index is designed to cover the declassified and unclassified work of the University of Rochester Atomic Energy Project from its beginning in 1943 until the end of 1952. It contains titles of the work described in Manhattan District and Atomic Energy Commission reports as well as of material published in books and journals.

The Atomic Energy Project was administered by the Department of Radiology of the School of Medicine and Dentistry from 1943 to 1947 and by the Department of Radiation Biology since that time. Papers on non-Project work of the Department of Radiology are not listed here but some of those from the Department of Radiation Biology from 1948 on are included. Therefore, although the listing covers all of the Project work of a given author, it does not necessarily include all of his work during the period he was associated with this school.

When the same work is described in both internal reports and the open literature this is indicated by cross references. Although monthly and quarterly progress reports are listed, the titles of their contents are not given unless the material covered is substantial or constitutes a final report. When the experimental work on a particular problem was extended over a long period there is a series of reports, the last of which usually will contain all the significant information or will refer to it in earlier reports.

The titles are grouped under broad subject headings only. Consequently, a topic of limited scope may fall under more than one heading. The most common cases in which this may occur are indicated in the Table of Contents.

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AECU-860	Laskin, S. Frank, P.B. Wilson, R.H.	Efficiency of filtration methods for the collection of atmospheric impurities. (<u>Nuclear Sci. Abs.</u> 4-5215, 1950)	

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UR-29 AECD-2066	Boyd, G.A. Williams, A.I.	Stripping film techniques for histological autoradiographs. (<u>Proc. Soc. Exptl. Biol. Med.</u> 69:225-232, 1948)	5/20/48
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MDDC-1226	Boyd, G.A.	The physical principles and techniques of autoradiographs. (<u>J. Biol. Phot. Assoc.</u> 16:65-77, Dec.1947)	7/28/47

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M-1576 MDDC-971	Flagg, J.F. Lobene, R.	A rapid method for the determination of nitrogen oxides in air. (<u>J. Ind. Hyg. Toxicol.</u> 30:370-372, 1948)	9/5/44
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M-1965 MDDC-1665	Kosel, G.E. Neuman, W.F.	A study of the reaction between beryllium and aurin tricarboxyllic acid.	4/47
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M-2008 MDDC-1569	Underwood, A.L.	A new colorimetric method for determining traces of beryllium	9/1/47
UR-3 AECD-1801	Neuman, W.F. Havill, J.R.	Polarographic studies of the uranyl-citrate complex. (NNES Div.VI, vol.1, chap.18, sec.1)	2/1/48
UR-18 AECD-1957	Steadman, L.T.	The spectrochemical determination of beryllium.	3/26/48
UR-19 AECD-1982	Underwood, A.L. Neuman, W.F.	Studies on the color reaction of beryllium with alkanet preparations.	4/5/48
UR-26 AECD-1990	Cucci, M.W. Neuman, W.F. Mulryan, B.J.	A quantitative study of the reaction between beryllium and quinizarin, 2-sulfonic acid. (<u>Anal. Chem.</u> 21:1358-1360, 1949)	5/6/48
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- MDDC-1485 Fink, K.
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- MDDC-1487 Fink, R.M.
Fink, K. Use of radioactive reagents in filter paper partition chromatography. (Nature 160:801-803, 1947)
- MDDC-1486 Fink, R.M.
Fink, K. Radiocarbon and filter paper partition chromatography. (Science 107:253-254, 1948)
- Neuman, W.F.
Fleming, R.W.
Carlson, A.B.
Glover, N. The fluorophotometric determination of uranium in biological material. (J. Biol. Chem. 173:41-52, 1948)
- Toribara, T.Y.
Underwood, A.L. Preparation of alkannin and naphthazarin for use as reagents for beryllium. (Anal. Chem. 21:1352-1356, 1949)
- Underwood, A.L.
Neuman, W.F. Color reaction of beryllium with alkannin and naphthazarin. Spectrophotometric studies. (Anal. Chem. 21:1348-1352, 1949)
- Kosel, G.E.
Neuman, W.F. Color reaction between beryllium and aurin tricarboxylic acid. (Anal. Chem. 22:936-939, 1950)
- Smith, F.A.
Gardner, D.E. A comparison of the thorium nitrate back-titration and the salt-acid thorium titration for the determination of fluoride. (Arch. Biochem. 29:311-314, 1950)

CHEMISTRY OF BONE

M-1672	Hodge, H.C.	The adsorption of strontium at forty degrees by enamel, dentine, bone, and hydroxyapatite as shown by the radioactive isotope. (<u>J. Biol. Chem.</u> 163:1-6, 1946)	4/11/45
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M-2015 AECD-1916	Neuman, W.F. Neuman, M.W.	The deposition of uranium in bone. II. Radioautographic studies. (NNES Div. VI, vol. 1, chap. 24, sec. 2) (<u>J. Biol. Chem.</u> 175:711-714, 1948)	2/9/48
M-2016 AECD-1917	Neuman, W.F. Neuman, M.W. Main, E.R. Mulryan, B.J.	The deposition of uranium in bone. III. Effect of diet. (NNES Div. VI, vol. 1, chap. 24, sec. 3) (<u>J. Biol. Chem.</u> 175:715-719, 1948; <u>Phys. Rev.</u> 74:1330-1337, 1948)	2/9/48
M-2017 AECD-2215	Neuman, W.F. Neuman, M.W. Main, E.R. Mulryan, B.J.	The deposition of uranium in bone. IV. <u>In vitro</u> adsorption studies. (NNES Div. VI, vol. 1, chap. 24, sec. 4) (<u>J. Biol. Chem.</u> 179:325-333, 1949)	3/10/48
M-2018 AECD-2018	Neuman, W.F. Neuman, M.W. Main, E.R. Mulryan, B.J.	The deposition of uranium in bone. V. Ion exchange studies. (NNES Div. VI, vol. 1, chap. 24, sec. 5) (<u>J. Biol. Chem.</u> 179:335-340, 1949)	3/23/48
M-2019 AECD-2019	Neuman, W.F. Neuman, M.W. Main, E.R. Mulryan, B.J.	The deposition of uranium in bone. VI. Ion competition studies. (NNES Div. VI, vol. 1, chap. 24, sec. 6) (<u>J. Biol. Chem.</u> 179:341-348, 1949)	4/6/48
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UR-66 AECD-2580	Neuman, W.F. Neuman, M.W. Mulryan, B.J.	The failure of non-isotopic uranium to inhibit resorptive processes in rat femur. (NNES Div. VI, vol. 1, chap. 24, sec. 8) (<u>J. Biol. Chem.</u> 182:151-152, 1950)	3/21/49
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- UR-162 Neuman, W.F.
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- Neuman, W.F.
Riley, R.F. The uptake of radioactive phosphorus by the calcified tissues of normal and choline-deficient rats. (J. Biol. Chem. 168:545-554, 1947)
- Falkenheim, M.
Neuman, W.F.
Hodge, H.C. Phosphate exchange as the mechanism for adsorption of the radioactive isotope by the calcified tissues. (J. Biol. Chem. 169:713-722, 1947)
- Hodge, H.C.
Underwood, E.E.
Falkenheim, M. Rates of calcium exchange in the system; powdered bone in calcium chloride solution. (Federation Proc. 9:286, 1950)
- Neuman, W.F.
Mulryan, B.J. Studies on the surface chemistry of bone. I. Recrystallization. (Federation Proc. 9:304, 1950)
- Neuman, W.F.
DiStefano, V.
Mulryan, B.J. The surface chemistry of bone. III. Observations on the role of phosphatase. (J. Biol. Chem. 193:227-235, 1951)

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UR-5 AECU-1964	Rothstein, A. Meier, R.	Phosphatases in cell surface of living yeast cells. (NRES Div.VI, vol.1, chap. 25, sec.6) (<u>J. Cellular Comp. Physiol.</u> 32:77-95, 1948)	1/6/48 M-RU
UR-45 p.46	Neuman, W.F. Feldman, I.	Uranium complex.	10/15/48
UR-45 p.46-49	Rothstein, A.	Dissociation constants of various uranium complexes.	10/15/48
UR-45 p.107	Neuman, W.F. O'Leary, J.F.	Partition-chromatography of lipids.	10/15/48 M-RU
UR-58 AECU-106	Smith, F.A. Dziuba, S.P.	Preliminary observations on the uranium content of photographic materials.	12/22/48 M-RU
UR-62 AECU-146	Feldman, I. Danley, R. O'Leary, J.F.	Physico chemical studies of beryllium complexes. II. An improved centrifuge type of ultrafiltration apparatus. (<u>Anal. Chem.</u> 22:837-838, 1950)	2/15/49
UR-69 AECU-225	Rothstein, A.	The relationship of the cell surface to metabolism. IV. The role of cell surface phosphatases of yeast. (NRES Div.VI, vol.1, chap.25, sec.7) (<u>J. Cellular Comp. Physiol.</u> 34:97-114, 1949)	4/6/49 UR 00338

- UR-98 Rothstein, A. Meier, R. Relationship of the cell surface to metabolism. VI. Hydrolysis of sucrose and raffinose. 10/28/49
- UR-105 Danley, R. Feldman, I. Neuman, W.F. Physicochemical studies of beryllium complexes. III. A quantitative investigation of the beryllium-citrate complex in basic media. 1/23/50
- UR-109 Underwood, A.L. Toribara, T.Y. Neuman, W.F. Beryllium complexes with naphthazarin and alkannin. (J. Am. Chem. Soc. 72: 5597-5602; 1950) 3/26/50
- UR-120 AECD-2886 Rothstein, A. Meier, R. Larabee, C.M. The relationship of the cell surface to metabolism: VII. The chemical nature of osmium-complexing groups of the cell surface. (NNES Div. VI, vol. 1, chap. 25, sec. 3) (J. Cellular Comp. Physiol. 38: 245-270; 1951) 5/18/50
- UR-127 p.23-27 Gabrio, B.W. A paper chromatographic study of ferritin and apoferritin hydrolysates. (Science 112:358-359, 1950) 8/1/50
- UR-142 p.29-40 Gosselin, R.E. Rothstein, A. Berke, H.L. Miller, G.J. Meier, R.C. The metabolism of polyphosphates in reference to the treatment of metal poisoning. (Am. J. Physiol. 163:715, 1950; J. Pharmacol. Exptl. Therap. 101: 14, 1951) 11/1/50
- UR-143 Rothstein, A. Berke, H. Manifold effects of 2,4-dinitrophenol on the metabolism of living yeast cells. 11/7/50
- UR-149 Neuman, W.F. DiStefano, Y. Mulryan, B.J. Some observations on the role of phosphatase. (Nuclear Sci. Abs. 5-3803, 1951) 1-17/51
- UR-163 Gosselin, R.E. Rothstein, A. Berke, H. Miller, G. Tidball, C. Meier, R. Observations on the metabolism of a soluble sodium phosphate glass and its calcium salt. 5/3/51
- UR-181 Feldman, I. Havill, J.R. Some ion-exchange studies of the polymerization of beryllium. (J. Am. Chem. Soc. 74:2337-2340, 1952) 8/29/51
- UR-189 p.33-38 Richmond, J.E. Altman, K.I. The ozonolysis of substituted maleic acid imides and their use in the degradation of porphyrins. (XII Intern. Congr. Pure Applied Chem., Abstracts of Papers, p.70, 1951) 10/25/51
- UR-198 Feldman, I. Havill, J.R. Neuman, W.F. Physicochemical studies of beryllium complexes. IV. Ion-exchange studies of the beryllium-citrate complex. 4/25/52

UR-205 p. 11-17	Mason, W.B. Coco, S. Knight, K.	Studies on the quantitative separation of protein bound iodine from iodide.	5/14/52
UR-213 p. 3-6	Toribara, T.Y. Feldman, I.	Concerning the application of ion exchange resins to studies of complex ions.	7/31/53
UR-213 p. 7-11	Feldman, I. Havill, J.R.	Concerning the presence of citrate in commercial crystallized bovine serum albumin.	7/31/52
UR-213 p. 55	Rothstein, A. Demis, C.	The stimulation of yeast cell-metabolism by extracellular potassium. (Abstract)	7/31/52
UR-213 p. 56	Rothstein, A. Berke, H.	Effects of dinitrophenol (DNP) on endogenous respiration and fermentation on yeast. (<u>Federation Proc.</u> 11:133, 1952)	7/31/52
UR-213 p. 57	Bair, W. Rouser, G.	Free amino acids in yeast under various conditions. (<u>Federation Proc.</u> 11:183, 1952)	7/31/52
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UR-213 p. 68	Rouser, G. Neuman, W.F.	Identification of phosphate esters in tissues by paper chromatography. (<u>Federation Proc.</u> 11:278, 1952)	7/31/52
UR-214	Rothstein, A. Demis, C.	The relationship of the cell surface to metabolism. VIII. The stimulation of fermentation by extracellular potassium.	7/29/52
	Roberts, E. Spiegel, C.J.	The influence of dietary protein, methionine and cystine on accelerated vitamin C excretion in the rat. (<u>J. Biol. Chem.</u> 165:727-728, 1946; 171:9-26, 1947)	
MDDC-1390	Tishkoff, G.H.	Dimerization and adsorption at the dropping mercury electrode.	8/15/47
MDDC-1522	Rothstein, A. Meier, R.	Triphosphatase and other phosphatases on the surface of living yeast cells.	11/18/47
MDDC-1561	Rothstein, A.	Some procedures for the preparation of highly purified adenosine triphosphate.	11/21/47
MDDC-1734	Waterhouse, C. Cusson, K. Bassett, S.H.	Metabolic studies on a solution of purified human albumin given intravenously to man. (<u>Abg. Declassified Doc.</u> 2:170, 1948)	
	Dounce, A.L. Rothstein, A. Beyer, G.T. Meier, R.	A detailed method for the preparation of highly purified adenosine triphosphate. (<u>J. Biol. Chem.</u> 174:361-370, 1948)	

1129883

- AECD-2613 Waterhouse, C. Metabolic studies on protein depleted patients receiving a large part of the nitrogen intake from human serum albumin administered intravenously. (J. Clin. Invest. 28:245-264, 1949)
- Altman, K.I. A new method for the preparation of uricase and the effect of uricase on the blood uric level of chickens. (Arch. Biochem. 21:158-165, 1949)
- Smull, K.
Barron, E.S.G.
- Salomon, K. A study on mescaline in human subjects. (J. Pharmacol. Exptl. Therap. 95:455-459, 1949)
- Gabrio, B.W.
Thale, T.
- Furman, N.H. Extraction of cupferrates. (Anal. Chem. 21:1325-1330, 1949)
- Mason, W.B.
Pekola, J.S.
- Boyd, G.A. A preliminary report on histochemistry. (Science 110:586-588, 1949)
- Board, F.A.
- Rothstein, A. Early divergence of pathways of aerobic and anaerobic glucose metabolism in yeast. (Federation Proc. 9:110-111, 1950)
- Hurwitz, L.
Meier, R.
- Miller, L.L. The loss and regeneration of rat liver enzymes related to diet protein. (J. Biol. Chem. 186:253-260, 1950)
- Neuman, W.F. The uranyl:citrate system. II. Polarographic studies of the 1:1 complex. (J. Am. Chem. Soc. 73:3593-3595, 1951)
- Havill, J.R.
Feldman, I.
- Feldman, I. The beryllium:citrate system. I. Dialysis studies in alkaline solution. (J. Am. Chem. Soc. 73:4775-4777, 1951)
- Danley, R.A.
Havill, J.R.
- Rothstein, A. The relationship of the cell surface to metabolism. V. The role of uranium-complexing loci of yeast in metabolism. (J. Cellular Comp. Physiol. 37:57-81, 1951)
- Meier, R.
Hurwitz, L.
- Hurwitz, L. The relationship of the cell surface to metabolism. VII. The kinetics and temperature characteristics of uranium-inhibition. (J. Cellular Comp. Physiol. 38:437-450, 1951)
- Rothstein, A.
- Rothstein, A. The function of enzymes on the surface of the cell. (Science 114:1, Dec.28, 1951)
- Richmond, J.E. The ozonolysis of substituted maleic acid imides and its application to the degradation of porphyrins. (J. Am. Chem. Soc. 74:4368-4370, 1952)
- Altman, K.I.
- Rothstein, A. Endogenous alcoholic fermentation in yeast induced by 2,4-dinitrophenol. (Arch. Biochem. UR 00341 Bionhvs. 36:195-201, 1952)
- Berke, E.

CHEMISTRY, TRACER

- UR-15
AECD-1967 Bonner, J.F., Jr. The influence of age on the uptake of radioactive phosphorus by the skeleton. (NNES Div.VI, vol.1, chap. 24, sec.10) 3/17/48
- UR-20
AECD-2017 Mann, W.
Gruschow, J. Synthesis of nucleic acid in surviving normal and cancer tissue slices studies with radiophosphorus. (Proc. Soc. Exptl. Biol. Med. 71:658-660, 1949) 4/12/48
- UR-38
p.18-24 Salomon, K.
Altman, K.I. Some aspects of glycine metabolism. I. Experiments with bone marrow in vitro (Studies on porphyrin and fatty acid metabolism). II. Experiments with spleen homogenates in vitro. 7/15/48
- UR-38
p.77-96 Miller, L.L.
Bale, W.F. Studies of protein metabolism in the dog using C¹⁴ labeled DL-lysine. I. The distribution of C¹⁴ activity 24 hours after ingestion of C¹⁴ labeled DL-lysine. II. The fate of C¹⁴ labeled plasma proteins when injected intravenously into a normal dog. III. The fate of C¹⁴ labeled plasma proteins when injected into the peritoneal cavity of the experimentally ascitic dog. IV. The intermediary metabolism of lysine. 7/15/48
- UR-45
p.91-94 Miller, L.L.
Bale, W.F. Studies in protein metabolism in the dog using C¹⁴-labeled DL-lysine. I. The in vivo conversion of lysine to glutamic and aspartic acids. 10/15/48
- p.95-98 Miller, L.L. II. The conversion of lysine to arginine. 10/15/48
- UR-52
AECU-77 Altman, K.I.
Casarett, G.
Noonan, T.R.
Salomon, K. The distribution in rat tissues of the methylene carbon atom of glycine labeled with C¹⁴. (Arch. Biochem. 23:131-136, 1949) 12/20/48
- UR-53
AECU-95 Falkenheim, M.
Underwood, E.E.
Hodge, H.C. Calcium exchange as the mechanism for adsorption of the radioactive isotope by bone. (NNES Div.VI, vol.1, chap.24, sec.9) (J. Biol Chem. 188: 805-817, 1951) 12/1/48
- UR-71
AECU-344 Tishkoff, G.H.
Bennett, R.
Bennett, V.
Miller, L.L. The use of radioiodine and paper chromatography technique in the study of thyroid metabolism. (Science 110:452-454, 1949) 5/10/49

- UR-72 Allen, R.R. The effect of added carrier on the 5/11/49
AECU-294 Bonner, G. distribution and excretion of soluble
Kosel, C.E. Be⁷. (J. Biol. Chem. 182:291-298,
Neuman, W.F. 1950)
Scott, J.K.
Sparks, A.F.
- UR-78 Altman, K.I. Hemin synthesis in spleen homoge- 6/3/49
AECU-422 Salomon, K. nates. (Science 111:117-118, 1950)
- UR-87 Miller, L.L. Studies in protein metabolism in 7/30/49
p.53-74 Bale, W.F. the dog using C¹⁴-labeled DL-lysine.
AECU-490 Yule, C.L. I. Synthesis and utilization of
Masters, R.E. plasma proteins. (J. Exptl. Med. 90:
Tishkoff, G.H. 297-313, 1949)
Whipple, G.H.
- UR-87 Bale, W.F. Studies in protein metabolism in 7/30/49
p.74-82 Yule, C.L. the dog using C¹⁴-labeled DL-lysine.
AECU-489 DeLaVergne, L. II. Hemoglobin labeled by radio-
Miller, L.L. active lysine-erythrocyte life cycle.
Whipple, G.H. (J. Exp. Med. 90:315-320, 1949)
- UR-93 McConnell, K.P. Distribution of selenium in dog 10/14/49
Cooper, B.J. serum proteins and red blood cells
after subcutaneous injection of
sodium selenate containing radio-
selenium.
- UR-96 Salomon, K. Some aspects of glycine metabolism 11/3/49
p.21-29 in bone marrow homogenates.
- UR-96 Miller, L.L. Studies in protein metabolism using 11/3/49
p.86-94 Bale, W.F. C¹⁴-labeled DL-lysine. Direct evi-
Bly, C.G. dence of the role of the liver in
Watson, M. plasma protein synthesis.
- UR-97 Clark, R.T., Jr. The oxidation of carbon monoxide to 10/27/49
Stannard, J.N. carbon dioxide as shown by experiments
Fenn, W.O. with C¹⁴. I. The oxidation of carbon
monoxide by isolated tissues. II. Evi-
dence for the conversion of carbon
monoxide to carbon dioxide by the
intact animal. (Am. J. Physiol. 161:
40-46, 1950; 162:560-564, 1950)
- UR-100 O'Leary, J. Experiments with paper chromatography 12/9/49
Neuman, W.F. of the animal phospholipids.
- UR-103 Salomon, K. Studies on the biosynthesis of 1/31/50
p.14-20 Altman, K.I. chlorophyll.
Della Rosa, R.
Sanfilippo, S.J.
- UR-134 Richmond, J.E. The relation of oxygen uptake to 9/15/50
Altman, K.I. hemoglobin synthesis. (Science 113:
Salomon, K. 404-405, 1951)

UR-142 p.13-15	Altman, K.I. Miller, L.L. Richmond, J.E.	The role of the carbon skeleton of lysine in the biosynthesis of hemoglobin. (<u>Arch. Biochem.</u> 29:447-448, 1950)	11/1/50
UR-142 p.79-95	Miller, L.L. Bly, C.G. Bale, W.F.	Studies in protein metabolism with a C^{14} -labeled DL-lysine.	11/1/50
UR-144	Altman, K.I. Miller, L.L. Bly, C.G.	The synergistic effect of cortisone and insulin on lipogenesis in the perfused rat liver as studied with α - C^{14} -acetate. (<u>Arch. Biochem. Biophys.</u> 31:329-331, 1951)	11/29/50
UR-151	Stokinger, H.E. Altman, K.I. Salomon, K.	Hemin and globin synthesis in beryllium-induced anemia studied with alpha- C^{14} -acetate. (<u>Nuclear Sci. Abs.</u> 5-5003, 1951)	1/19/51
UR-164 p.64-72	Stokinger, H.E. Altman, K.I. Salomon, K.	Hemin and globin synthesis in beryllium-induced anemia studied with alpha C^{14} -acetate.	5/9/51
UR-164 p.78-86	Miller, L.L. Bly, C.G.	The relation between liver cell proteins and plasma proteins studied with the aid of lysine- C^{14} .	5/9/51
UR-164 p.87-89	Miller, L.L. Rothstein, M.	The intermediary metabolism of DL-lysine- C^{14} ; the conversion of lysine to glucose and ketone bodies in the phloridzinized rat.	5/9/51
UR-169	Altman, K.I. Richmond, J.E. Salomon, K.	A note on the synthesis of fatty acids in bone marrow homogenates as affected by x-radiation. (<u>Biochim. et Biophys. Acta</u> 7:460-465, 1951)	5/17/51
UR-179	Richmond, J.E. Altman, K.I. Salomon, K.	Hemoglobin synthesis in bone marrow and spleen homogenates as affected by x-radiation.	7/23/51
UR-200 p.27-35	Miller, L.L.	Experimental cirrhosis and its effects on amino acid metabolism and plasma protein production as studied with the aid of lysine- C^{14} .	2/11/52
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UR-208	Salomon, K. Richmond, J.E. Altman, K.I.	Tetrapyrrol precursors of protoporphyrin IX. I. Uroporphyrin III. (<u>J. Biol. Chem.</u> 196:463-468, 1952)	5/19/52

- UR-213
p.38-46 Miller, L.L. Preparative electrophoretic studies of plasma protein synthesis by the isolated perfused liver and the eviscerated rat using DL-lysine- $-C^{14}$. 7/31/52
- UR-213
p.58 Rothstein, M. Metabolism of 1,5- C^{14} -glutaric acid. (Federation Proc. 11:278, 1952). 7/31/52
- UR-213
p.59 Salomon, K. Role of uroporphyrin III as a precursor of protoporphyrin IX. (Federation Proc. 11:280, 1952) 7/31/52
- UR-213
p.60 Miller, L.L. Factors affecting biosynthesis of plasma albumin and globulin fractions as studied with the aid of lysine- $-C^{14}$ and histidine-2- C^{14} . (Federation Proc. 11:260, 1952) 7/31/52
- UR-213
p.62 Toporek, M. L-histidine-2- C^{14} , a source of labile methyl groups with transmethylation enhanced by choline deficiency. (Federation Proc. 11:299, 1952). 7/31/52
- UR-213
p.63 Altman, K.I. A comparison of rates of incorporation of iron and of the α -carbon atom of glycine into hemoglobin. (Federation Proc. 11:4, 1952) 7/31/52
- UR-216 Frankel, D.R. The relation of protein synthesis to nucleic acid phosphorus turnover in the rat liver. (Thesis) 9/10/52
- UR-223 Rothstein, M. The metabolism of glutaric acid-1,5- C^{14} : I. In normal and phlorizinized rats. (J. Biol. Chem. 199:199-205, 1952) 10/22/52
- Mann, W. The distribution in rabbit tissues of intravenously injected iodine as shown by the radioisotope, I 130. (J. Pharmacol. Exptl. Therap. 95:12-17, 1948)
- MDDC-1758 Altman, K.I. Hemin synthesis with glycine containing C^{14} in its alpha carbon atom. (J. Biol. Chem. 176:319-325, 1948; abstract - Federation Proc. 7:2, 1948)
- AECU-64 Miller, L.L. Metabolic conversion of carbon chain of DL-lysine- $-C^{14}$ to L-glutamic and L-aspartic acids in the dog. (abstract - Federation Proc. 8:230, 1949) 11/16/48
- AECU-56 Miller, L.L. Metabolic conversion of carbon chain of DL-lysine- $-C^{14}$ to L-arginine in the dog. (abstract - Federation Proc. 8:229, 1949) 11/16/48

- Salomon, K.
Altman, K.I.
Casarett, G.W.
Noonan, T.R.
Effect of x-ray radiation and of starvation on hemoglobin synthesis in the rat. (Federation Proc. 8:247, 1949)
- AECU-65 Altman, K.I.
Salomon, K.
Noonan, T.R.
Hemin synthesis in rabbit bone marrow homogenates. (J. Biol. Chem. 177:489-490, 1949)
- AECD-2361 Altman, K.I.
The in vitro incorporation of the methylene carbon atom of glycine into rabbit bone marrow fats. (J. Biol. Chem. 177:985-986, 1949)
- Noonan, T.R.
Altman, K.I.
Casarett, G.W.
Salomon, K.
Incorporation of glycine in the tissues of acutely starved rat. (Federation Proc. 8:119, 1949)
- Altman, K.I.
Casarett, G.W.
Noonan, T.R.
Salomon, K.
Radiation effects on tissues studied with C¹⁴-labeled glycine. (Federation Proc. 8:349, 1949)
- AECU-745 Bly, C.G.
Miller, L.L.
Bale, W.F.
The minor role of the non-hepatic tissues in plasma protein synthesis as observed with the aid of lysine-C¹⁴. (Federation Proc. 9:153, 1950; Nuclear Sci. Abs. 4-3634, 1950)
- Bonner, J.F.
The influence of age on the uptake of radioactive phosphate by the skeleton of the rat. (Federation Proc. 9:328, 1950)
- AECU-746 Miller, L.L.
Bly, C.G.
Watson, M.L.
Bale, W.F.
Plasma protein synthesis as observed in a direct study of the liver with the aid of lysine-C¹⁴. (Federation Proc. 9:206, 1950; Nuclear Sci. Abs. 4-3635, 1950)
- Salomon, K.
Altman, K.I.
Della Rosa, R.
Studies on the biosynthesis of chlorophyll. (Federation Proc. 9:222, 1950)
- Benjamin, J.A.
Neuman, W.F.
Thompson, H.E.
Waterhouse, C.
Radioactive phosphorus (P³²) used to study phosphate exchange between urine in the renal pelvis and renal calculi containing phosphate. (Science 111:498-499, 1950)
- Yuille, C.L.
Iamson, B.G.
Miller, L.L.
Whipple, G.H.
Conversion of plasma protein to tissue protein without evidence of protein breakdown. Results of giving plasma protein labeled with carbon¹⁴ parenterally to dogs. (J. Exptl. Med. 93:539-557, 1951)
- Miller, L.L.
Bly, C.G.
Watson, M.L.
Bale, W.F.
The dominant role of the liver in plasma protein synthesis. A direct study of the isolated perfused rat liver with the aid of lysine-C¹⁴. (J. Exptl. Med. 94:431-453, 1951)

- Richmond, J.E. The effect of x-radiation on the biosynthesis
 Altman, K.I. of hemoglobin. (J. Biol. Chem. 190:817-825,
 Salomon, K. 1951)
- Altman, K.I. The incorporation of α -C¹⁴-acetate into the
 Watman, R.N. stroma of the erythrocyte. (Arch. Biochem.
 Salomon, K. Biophys. 33:168-169, 1951)
- Altman, K.I. The role of the carbon skeleton of lysine
 Miller, L.L. in the biosynthesis of hemoglobin. (Arch.
 Richmond, J.E. Biochem. Biophys. 36:399-410, 1952)
- Morrow, P.E. The gastrointestinal non-absorption of
 Hodge, H.C. sodium cellulose sulfate labeled with S³⁵.
 Neuman, W.F. (J. Pharmacol. Exptl. Therap. 105:273, 1952)
- Maynard, E.A.
 Blanchet, H.J., Jr.
 Fassett, D.W.
 Birk, R.E.
 Marrodt, S.
- Toporek, M. Carbon atom 2 of L-histidine-2-C¹⁴, a source
 Miller, L.L. of the carbon of labile methyl groups in
 Bale, W.F. liver. (J. Biol. Chem. 198:839-851, 1952)

CIA

EDUCATIONAL PROGRAM

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UR-131	Watson, M.L. Jacobson, B.L.	Preparation of tissue sections for examination in the electron microscope.	8/10/50
UR-164 p.103-113	Watson, M.L.	Improved techniques for the preparation of tissue sections for the electron microscope.	5/9/51
UR-185	Watson, M.L.	Spermatogenesis in the adult albino rat as revealed by tissue sections in the electron microscope. (<u>Biochim. et Biophys. Acta</u> 8:369-374, 1952) (Thesis)	1/21/52
UR-205 p.60-66	Watson, M.L.	A method for complete extraction of embedding material from tissue sections for the electron microscope.	5/14/52
UR-205 p.67-71	Watson, M.L.	A new microtome for thin-sectioning for electron microscopy.	5/14/52
UR-231	Robinson, R.A.	Collagen-crystal relationships in bone	11/28/52

- AECU-63 Bishop, F.W. Device for producing an easily identified area on electron microscope specimen screen. (Rev. Sci. Instruments 20:324, 1949)
- Bishop, F.W. A technique for the production of silica-filmed electron microscope screens in quantity. (Rev. Sci. Instruments 20:529-530, 1949)
- Bishop, F.W. A magnetic beam-splitting focusing device for the electron microscope. (Rev. Sci. Instruments 20:532-533, 1949)
- AECU-673 Robinson, R.A. Methods of preparing bone and tooth samples for viewing in the electron microscope. (Science 111:655-657, 1950)
- Bishop, F.W. Photometer for electron microscope. (Electronics 23:110-111, Sept. 1950)

EXTERNAL RADIATION - BIOLOGICAL EFFECTS

M-1592	Harvey, R.A.	Report no.1 - Dermatoglyphic unit.	9/1/44
M-1794	Bishop, F.W.	Effect of low voltage (30KV) x-radiation on the skin of the rabbit's ear.	11/13/45
M-1908	Stern, C. Uphoff, D. Maas, R. Monture, E O'Brien, M.	Experiments to test the validity of the linear r dose/mutation relation in <u>Drosophila</u> at low doses: acute irradiation with radium.	10/4/46
M-1966 MDDC-1200	Caspari, E. Stern, C.	The influence of chronic irradiation with gamma rays at low dosages on the mutation rate in <u>Drosophila Melanogaster</u> . (NRES Div.VI, vol.2, chap.16) (<u>Genetics</u> 33:75-95, 1948)	4/26/47
M-2000 MDDC-1492	Uphoff, D.E. Stern, C.	The influence of irradiation for 24 hours with gamma rays at low dosage on mutation rate in <u>Drosophila</u> .	9/24/47
M-2001 MDDC-1488	Novitski, E.	The lack of an effect of aging on mutation rate induced by irradiation.	9/24/47
M-2002 p.17-20	Steadman, L.T.	Absorption spectra of the blood of irradiated animals.	11/15/47
M-2012 p.9-11	Noonan, T.R.	The effect of age upon survival time after acute irradiation.	1/15/48
UR-38 p.13-18	Noonan, T.R. Casarett, G.	Pathological findings in pigeons subjected to a single dose (5,000 r) of total body x-radiation.	7/15/48
UR-45 p.14-20	Noonan, T.R. Casarett, G.	Comparison of histopathological effects of radiation in adult and weanling rats subjected to 800 r acute body x-radiation.	10/15/48
UR-45 p.21-34	Steadman, L.T. Thompson, H.E.	Measurements on the blood plasma proteins of irradiated rabbits.	10/15/48
UR-45 p.35-43	Howland, J.W. Bennett, L.R.	Preliminary studies on the role of the adrenal in the radiation syndrome.	10/15/48
UR-45 p.43	Bradford, W.L.	Preliminary studies to determine the effect of the route of inoculation on the white blood cells in mice.	10/15/48
UR-45 p.43-44	Bradford, W.L.	Effect of x-ray irradiation on experimental murine pertussis.	10/15/48
UR-45 p.107-111	Hursh, J.B.	Effect of x-radiation on the uptake of iodine.	10/15/48

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UR-46 AECU-17	Bennett, L.R. Collier, V. Kresge, M. Rekers, P.E.	A study of blood and salivary lysozyme in the x-irradiated dog.	11/1/48
UR-70 p.14-23	Steadman, L.T. Thompson, H.E.	Changes in plasma total lipids after whole body x-irradiation of rabbits.	4/25/49
UR-76 AECU-421	Bennett, L.R. Rekers, P.E. Kresge, M. Howland, J.W.	The influence of infection on the hematological effects and mortality following mid-lethal x-radiation.	5/24/49
UR-88	Metcalf, R.G. Inda, F.A.	Pathology in animals subjected to repeated daily exposure to roentgen rays. (NNES Div.VI, vol.2, chap.12)	7/5/51
UR-89 AECU-615	Hursh, J.B. Mohny, J.B. VanValkenburg, P.A.	Effect of x-irradiation on thyroid function in rats.	8/24/49
UR-90 AECU-604	Bennett, L.R. Bennett, V.C. Shaver, A. Grachus, T.	Studies on the absorption and distribution of vitamin A in x-irradiated rats. (Proc. Soc. Exptl. Biol. Med. 74:439-443, 1950)	8/25/49
UR-92	Ely, J.O. Ross, M.H. Metcalf, R.G. Inda, F.A. Barnett, T.B. Casarett, G.W.	Clinical, pathological and hematological effects of chronic neutron radiation. (NNES Div.VI, vol.2, chap.18)	1/16/50
UR-96 p.13-20	Miller, L.L. Gates, E.	The effect of whole body radiation on plasma peptidase activity and plasma fibrinogen content. Possible indicators of injury from low dosage whole body radiation.	11/3/49
UR-96 p.31-34	Wilson, J.G.	Effects of x-irradiation on embryonic development in the rat.	11/3/49
UR-103 p.20-28	Steadman, L.T. Thompson, H.E.	Changes in blood lipids after whole body x-irradiation.	1/31/50
UR-104	Rekers, P.E.	Induced pregnancy in a mammalian host following severe total body x-irradiation. (J. Lab. Clin. Med. 37:331-341, 1951)	3/30/50
UR-113	Casarett, G.W.	Pilot experiments on indications of radiation sickness and comparison of lethal doses of x-rays for rats and dogs at intensities of 160 r per hour and when delivered in 24 hours.	4/17/50

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UR-123	Metcalf, R.G. Blandau, R.J. Barnett, T.B.	The pathological changes exhibited by animals exposed to single doses of x-radiation. (NRES Div. VI, vol. 2, chap. 2)	7/17/50
UR-127 p. 14-23	Casarett, G.W.	Effects of x-rays on spermatogenesis in dogs.	8/1/50
UR-135	Stannard, J.N.	Problems in the establishment of maximum permissible radiation exposure levels. (Nuclear Sci. Abs. 5-757, 1951)	10/9/50
UR-139	Ingram, M.	Health hazards in radiation work.	10/25/50
UR-140	Bennett, L.R. Rekers, P.E. Howland, J.W.	The influence of infection on the hematological effects and mortality following mid-lethal x-radiation. (Radiology 57:99-103, 1951)	10/27/50
UR-142 p. 16-28	Mason, K.E. Shaver, S.L.	The degenerative changes in the testes of the adult rat after x-irradiation.	11/1/50
UR-150	Brent, R.L. Jordan, H.C.	Possible late tumor development in rat embryos irradiated with 100 r of x-radiation on the 9th day of gestation. (Nuclear Sci. Abs. 5-4974, 1951)	1/19/51
UR-152 p. 13-33	Thompson, H.E. Steadman, L.T.	The effects of whole body x-irradiation on the blood glucose levels in rabbits.	2/1/51
UR-152 p. 44-46	Coulter, M.P. Furth, F.W. Howland, J.W.	The incidence of bacteremia in the x-radiated rat.	2/1/51
UR-152 p. 47-53	Furth, F.W. Coulter, M.P. Howland, J.W.	Effects of a second large dose of x-radiation on dogs surviving one dose of x-radiation.	2/1/51
UR-153	Wilson, J.G.	Neoplastic growths induced by x-irradiation in embryonic rats. (Nuclear Sci. Abs. 5-4975, 1951)	1/22/51
UR-157	Furth, F.W. Coulter, M.P. Howland, J.W.	Bacteriological studies in the x-radiated dog. (Am. J. Path. 28: 171-183, 1952)	2/13/51
UR-161	Noonan, T.R. VanSlyke, F. Hursh, J.B.	Effect of single doses of x-ray on the survival of rats.	4/20/51
UR-164 p. 13-17	Duffy, B.J., Jr.	Total body x-radiation and 17-ketosteroid excretion in dogs.	5/9/51

UR-164 p.18-24	Coulter, M.P. Furth, F.W.	Bacteriology of the x-irradiated dog.	5/9/51
UR-164 p.25-33	Furth, F.W. Watson, R. Coulter, M.P.	Glucose tolerance tests in the x-radiated dog.	5/9/51
UR-174 p.13-18	Noonan, T.R.	Effect of diet on radiation injury.	7/31/51
UR-174 p.37-40	Furth, F.W. Shrier, J. Markham, J. Crociata, M.	The Octab reaction of dog serum following x-irradiation.	7/31/51
UR-174 p.46-51	Ingram, M. Coonan, L. Nielsen, G. Jespersen, J. Piatt, D. Wright, M.	Bone marrow studies on dogs which survived single whole-body exposure to LD ₅₀ -100 doses of x-rays.	7/31/51
UR-178	Wilson, J.G. Karr, J.W.	Effects of irradiation on embryonic development. I. X-rays on the 10th day of gestation in the rat. (<u>Am. J. Anat.</u> 88:1-34, 1951)	7/30/51
UR-183	Wilson, J.G. Brent, R.L. Jordan, H.C.	Neoplasia induced in rat embryos by roentgen irradiation. (<u>Cancer Research</u> 12:222-228, 1952)	9/5/51
UR-189 p.16-19	Mason, W.B. Coulter, M.P. Furth, F.W.	Electrolyte studies in irradiated dogs.	10/25/51
UR-189 p.20-32	Bair, W.J. Stannard, J.N.	Effects of x-rays on yeast growth and metabolism.	10/25/51
UR-189 p.39-45	Colgan, J. Gates, E. Miller, L.L.	Serum and urinary plasmin activity related to the hemorrhagic diathesis in irradiated dogs.	10/25/51
UR-191	Miller, R.W.	Some potential hazards of the widespread use of roentgen rays in pediatrics.	3/13/52
UR-196	Ingram, M. Mason, W.B. Whipple, G.H. Howland, J.W.	Biological effects of ionizing radiation.	4/7/52
UR-200 p.54-58	Scott, J.K. Carr, M.	The activation of latent bartonellosis in the rat by external whole-body irradiation.	2/11/52
UR-205 p.18-30	Steadman, L.T. Grimaldi, A.J.	The prevention of x-irradiation induced hyperglycemia in rabbits by means of insulin.	5/14/52

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UR-205 p.36-47	Miller, R.W. Coulter, M.P.	Preliminary report on some clinical features of the radiation syndrome complicated by induced infection.	5/14/52
UR-206	Blair, H.A.	A formulation of the injury, life span, dose relations for ionizing radiations. I. Application to the mouse.	5/13/52
UR-207	Blair, H.A.	A formulation of the injury, life span, dose relations for ionizing radiations. II. Application to the guinea pig, rat and dog.	7/3/52
UR-209	Bale, W.F.	Relative effects of alpha, beta, gamma, and neutron radiation. The significance of these differences in radiation therapy.	5/28/52
UR-210	Colgan, J. Gates, E. Miller, L.L.	Serum and urinary fibrinolytic activity related to the hemorrhagic diathesis in irradiated dogs. (J. Exptl. Med. 95:531-542, 1952)	6/2/52
UR-213 p.29-37	Miller, R.W. Coulter, M.P.	Some clinical features of infection induced in the abdomen-shielded x-irradiated dog.	7/31/52
UR-213 p.64	Noonan, T.R. Noonan, A.M.	Effect of roentgen irradiation upon growth and peripheral blood cell levels of the albino rat. (Federation Proc. 11: 114, 1952)	7/31/52
UR-218	Shaver, S.L.	X-irradiation injury and repair in the germinal epithelium of male rats. I. Injury and repair in adult rats. (Thesis)	9/23/52
UR-219	Shaver, S.L.	X-irradiation injury and repair in the germinal epithelium of male rats. II. Injury and repair in immature rats. (Thesis)	9/23/52
UR-222 p.4-8	Miller, R.W. Watson, R.	Reticuloendothelial function in the x-irradiated (LD50) rabbit as measured by tolerance to pyrogenic material.	11/3/52
UR-222 p.25-36	Ingram, M. Adams, M. Coonan, L. Nielsen, G. Piatt, D. Yettewich, G.	Studies relative to the effect of Piromen on the number and the phagocytic activity of leukocytes of irradiated and normal dogs, and of one man.	11/3/52
UR-227	Steadman, L.T. Grimaldi, A.J.	Variation of x-radiation-induced lipemia in rabbits with dosage, administration of insulin or ammonium chloride, and the incidence of tetany.	11/7/52
UR-233	Wilson, J.G. Jordan, H.C. Brent, P. I.	Effects of irradiation on embryonic development. II. X-rays on the ninth day of gestation in the rat.	12/ /52 UR 00356

- MDDC-712 Craver, B.N. The effect of adrenal cortical injury on toxicity of x-rays. (Federation Proc. 6:319, 1947)
- MDDC-551 Craver, B.N. The effect of x-rays on the in vitro motility of feline intestine. (Am. J. Roentgenol. Radium Therapy 58:357-358, 1947)
- MDDC-1185 Grobman, A.B., Charles, D.R. A new dominant autosomal mutant affecting coat color in the mouse, Mus musculus. (J. Heredity 38:381-384, 1947)
- MDDC-936 Flick, J.J. Ocular lesions following the atomic bombing of Hiroshima and Nagasaki. (Am. J. Ophthalmology 31:147, 1948)
- MDDC-765 Spencer, W.P. Stern, C. Experiments to test the validity of the linear r-dose/mutation frequency relation in Drosophila at low dosage. (Genetics 33:43-74, 1948; NNES Div. VI, vol. 2, chap. 7)
- AECD-2010 Dale, P.P. The effect of x-rays on the rat incisor. (Abs. Declassified Doc. 2:339, 1948)
- MDDC-1450 Evans, T.C. Effects of small daily doses of fast neutrons on mice. (Radiology 50:811-834, 1948)
- Ingram, M. Health hazards in radiation work. (Science 111:103-109, 1950)
- AECU-830 Wilson, J.G. Karr, J.W. Difference in the effects of x-irradiation in rat embryos of different ages. 3/24/50
- AECU-747 Shaver, S.L. Mason, K.E. Selective testicular damage in rats due to x-rays. (Nuclear Sci. Abs. 4-3580, 1951)
- Hursh, J.B. VanValkenburg, P.A. Mohney, J.B. Effect of roentgen radiation on thyroid function in rats. (Radiology 56:411-418, 1951)
- Smith, W.W. Ackermann, I.B. Smith, F. Body weight, fasting and forced feeding after whole body x-irradiation. (Am. J. Physiol. 168:382-390, 1952)

EXTERNAL RADIATION - PROTECTIVE AND THERAPEUTIC MEASURES

M-2003 MDDC-1219	Rekers, P.E. Field, J.B.	Control of hemorrhagic syndrome and reduction in x-irradiation mortality with a flavonone. (<u>Science</u> 107:16-17, 1948)	8/12/47
M-2009 MDDC-1658	Field, J.B. Rekers, P.E.	A prophylactic approach to the anaphylactic factors in irradiation disease.	1/12/48
M-2010 MDDC-1672	Field, J.B. Rekers, P.E.	Ionizing irradiation disease and a study of the protective nature of flavonones. (<u>Am. J. Med. Sci.</u> 218:1-15, 1949)	1/12/48
UR-38 p.25-27	Rekers, P.E. Field, J.B.	Rutin studies.	7/15/48
UR-57 AECU-149	Field, J.B. Rekers, P.E.	Studies of the effects of flavonoids on roentgen irradiation disease. II. Comparison of the protective influence of some flavonoids and vitamin C in dogs. (<u>J. Clin. Invest.</u> 28:746-751, 1949)	1/19/49
UR-94	Howland, J.W. Furth, F.W. Bennett, L.R. Coulter, M.P. McDonnell, G.M.	Studies on factors effecting the radiation syndrome. I. The effect of aureomycin and antibiotics on whole body irradiation.	10/14/49
UR-116 p.22-34	Furth, F.W. Coulter, M.P.	The effect of aureomycin on the radiation syndrome in dogs.	4/27/50
UR-127 p.32-38	Furth, F.W. Coulter, M.P.	Effect of aureomycin and terramycin on the mortality and diarrhea of the x-irradiated rat.	8/1/50
UR-146	Furth, F.W. Coulter, M.P.	The effect of aureomycin on the radiation syndrome in dogs. (<u>Am. J. Path.</u> 28:25-36, 1952)	12/15/50
UR-147	Howland, J.W. Furth, F.W. Coulter, M.P.	Effect of terramycin on the acute radiation syndrome in dogs. (<u>Federation Proc.</u> 10:67, 1951)	1/15/51
UR-152 p.34-38	Furth, F.W. Coulter, M.P. Howland, J.W.	Failure of alpha tocopherol to protect against radiation injury in the rat.	2/1/51
UR-152 p.39-43	Furth, F.W. Coulter, M.P. Howland, J.W.	Effect of crude and crystallized aureomycin on the weight of normal and x-irradiated rats.	2/1/51
UR-158	Furth, F.W. Coulter, M.P. Howland, J.W.	The effect of aureomycin and terramycin on the x-irradiated rat. (<u>Am. J. Path.</u> 28:185-191, 1952)	2/14/51

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UR 00358

UR-174 p.19-25	Furth, F.W. Coulter, M.P. Shrier, J. Markham, J.	A study of the protective and therapeutic effect of folic acid and the citrovorum factor on the x-irradiated rat.	7/31/51
UR-174 p.26-30	Coulter, M.P. Furth, F.W.	The effect of Polymyxin on x-irradiated rats.	7/31/51
UR-174 p.31-36	Furth, F.W. Coulter, M.P.	The effect of aureomycin at two dosage levels on the acute radiation syndrome in the dog.	7/31/51
UR-174 p.41-45	Coulter, M. Furth, F.W.	The sensitivity to aureomycin and terramycin of bacteria from x-irradiated dogs.	7/31/51
UR-186	Swisher, S.N. Furth, F.W.	The effect of early small exchange transfusion on the x-irradiated dog. (Proc. Soc. Exptl. Biol. Med. 78:226-229, 1951)	10/11/51
UR-189 p.46-51	Coulter, M.P. Furth, F.W.	The effect of spleen shielding on x-irradiation mortality in dogs.	10/25/51
UR-189 p.52-55	Furth, F.W. Coulter, M.P. Miller, R.W. Swisher, S.N.	Effect of aureomycin and whole blood, singly and in combination, on the x-irradiated (575 r) dog.	10/25/51
UR-195	Coulter, M.P. Furth, F.W. Howland, J.W.	Therapy of the x-irradiation syndrome with terramycin. (Am. J. Path. 28:875-881, 1952)	4/2/52
UR-205 p.31-35	Coulter, M. Miller, R.	Protection of the x-irradiated dog with external abdominal shielding.	5/14/52
UR-205 p.57-59	Coulter, M. Furth, F.	Effect of rutin on the x-irradiated dog.	5/14/52
UR-213 p.21-28	Howland, J.W. Miller, R.W. Coulter, M.P.	Effect of Marsilia, Rimifon, or Aldinamide (anti-tuberculosis drugs) on some acute effects of x-irradiation of the rat.	7/31/52
UR-213 p.67	Furth, F.W. Coulter, M.P. Miller, R.W. Howland, J.W. Swisher, S.N.	Effect of aureomycin and whole blood separately and in combination on x-irradiated dog. (Federation Proc. 11:416, 1952)	7/31/52
UR-221	Furth, F.W. Coulter, M.P. Miller, R.W. Howland, J.W. Swisher, S.	The treatment of the acute radiation syndrome with aureomycin and whole blood.	11/8/52
UR-222 p.9-14	Cotton, W.K. Miller, R.W.	The effect of whole blood transfusion on dogs receiving an LD ₅₀ exposure to ionizing radiation.	11/3/52

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UR-222
p.15-24

Grace, J.L.
Seeger, J.
Miller, R.W.

The effect of cross-transfusions on the acute radiation syndrome in the dog.

11/3/52

AECU-748

Howland, J.W.
Furth, F.W.
Coulter, M.P.

The effect of aureomycin and antibiotics on whole body irradiation. (Federation Proc. 9:334-335, 1950; Nuclear Sci. Abs. 4-3581, 1951)

Howland, J.W.

Current concepts of therapy of the radiation syndrome. (J. Missouri State Med. Assoc. 425-429, May 1952.

Smith, W.W.
Ackermann, I.B.
Alderman, I.M.

Effects of dietary protein and methionine on the x-irradiated rat. (Am. J. Physiol. 169:491-498, 1952)

FLASH BURNS

UR-79 AECU-407	Payne, J.T. Hogg, L. Pearse, H.E.	The experimental study of flash burns. (<u>Arch. Path.</u> 49:267-277, 1950)	6/3/49
UR-96 p.35-56	Kingsley, H.D. Hogg, L. Pearse, H.E. DeLalla, V. Blakney, R.M. Davis, T.D.	[Continued studies of flash burns.]	11/3/49
UR-174 p.52-64	Morton, J.H. Kingsley, H.D. Pearse, H.E.	Studies on flash burns: threshold burns. (<u>Surg. Gynecol. Obstet.</u> 94:317-322, 1952)	7/31/51
UR-174 p.65-97	Morton, J.H. Kingsley, H.D. Pearse, H.E.	Studies on flash burns: the protective effects of certain fabrics. (<u>Surg. Gynecol. Obstet.</u> 94:497-501, 1952)	7/31/51
UR-174 p.98-103	Williams, D.B. Murden, C.H.	Biochemical studies on the flash burn: a device for the removal of uniform samples of skin in the frozen state.	7/31/51
UR-217	Perkins, J.B. Kingsley, H.D. Pearse, H.E.	A study of radiant energy burns: the effect of exposure time and intensity.	
UR-222 p.42-49	Berkley, K.M. Pearse, H.E. Kingsley, H.D.	Studies of flash burns: the influence of spectral qualities of the carbon arc source.	11/3/52
UR-226	Davis, T.P. Krolak, L.J. Blakney, R.M.	Studies of flash burns: the carbon arc source.	11/28/52
	Pearse, H.E. Payne, J.T. Hogg, L.	Experimental study of flash-burns. (<u>Ann. Surg.</u> 130:774-789, 1949)	
	Pearse, H.E. Payne, J.T.	Mechanical and thermal injury from the atomic bomb. (<u>New Engl. J. Med.</u> 241:647-653, 1949)	
	Morton, J.H. Kingsley, H.D.	Thermal burns from an atomic explosion. (<u>N. Y. State J. Med.</u> 51:2221-2222, 1951)	

HEMATOLOGY

M-1524	Wantman, M.J.	Memo, tables, and charts of the effect of daily doses of 10 r on blood counts of rats, mice, dogs, and monkeys.	7/7/44
M-1599	Valentine, W.N.	Leukemia.	n.d.
M-1604	Valentine, W.N.	Aplastic anemia.	1/22/45
M-1829	Tiedeman, D.V. Sutar, C.M. Wantman, M.J.	The error of determination of erythrocytes, hemoglobin, leucocytes, absolute neutrophils, and absolute lymphocytes.	1/46
M-1972 MDDC-1076	Craddock, C.G., Jr. Lawrence, J.S.	Hemophilia. A report of the mechanism of the development and action of an anti-coagulant in two cases.	6/3/47
M-1998 MDDC-1074	Adams, W.S. Lawrence, J.S.	Folic acid therapy. Results of a clinical study.	6/12/47
M-2002 p.21-24	Rekers, P.E.	Marrow transplantation.	11/15/47
M-2004 MDDC-1570	Valentine, W.N. Craddock, C.G., Jr. Lawrence, J.S.	The lymphocyte. Relation of adrenal cortical hormone to lymphoid tissue and lymphocytes. (<u>Blood</u> 3:729-754, 1948)	11/29/47
M-2007 MDDC-1538	Adams, W.S. Lawrence, J.S.	The negative effect of folic acid on irradiation leukopenia in the cat.	10/29/47
M-2011 MDDC-1698	Craddock, C.G., Jr. Lawrence, J.S.	The effect of roentgen irradiation on antibody formation in rabbits.	1/16/48
M-2013 MDDC-1763	Rekers, P.E.	The cultivation of the hematopoietic tissues by tissue culture methods.	1/19/48
UR-9 AECD-1925	Rekers, P.E. Coulter, M.P.	A hematological and histological study of the bone marrow and peripheral blood of adult dog. (<u>Am. J. Med. Sci.</u> 216: 643-655, 1948)	2/19/48
UR-11 AECD-1966	Rekers, P.E.	Transplantation of bone marrow into dogs that have received total body single dose radiation. (<u>Arch. Surg.</u> 60:635-667, 1950)	2/13/48
UR-14 AECD-1924	Valentine, W.N. Lawrence, J.S.	Studies on blood histamine; partition of blood histamine before and after clotting in health and disease states. (<u>Am. J. Med. Sci.</u> 216:619-624, 1948)	3/15/48
UR-16 AECD-2023	Valentine, W.N. Craddock, C.G. Lawrence, J.S.	The effect of roentgen radiation on the production of thoracic duct lymphocytes. (<u>Am. J. Med. Sci.</u> 217:379-382, 1949)	3/19/48

UR-22 AECD-2016	Lawrence, J.S. Valentine, W.N. Adams, W.S.	Thrombopenic purpura: the failure of direct blood transfusion to raise the platelet level. (<u>J. Lab. Clin. Med.</u> 33:1077-1081, 1948)	4/15/48
UR-25 AECD-2006	Adams, W.S. Lawrence, J.S.	The production of leukopenia by chronic irradiation of the abdominal viscera of the cat.	4/30/48
UR-32 AECD-2095	Craddock, C.G., Jr. Valentine, W.N. Lawrence, J.S.	The lymphocyte: studies on its relationship to immunologic processes in the cat. (<u>J. Lab. Clin. Med.</u> 34:158-177, 1949)	5/24/48
UR-70 p.24-26	Ingram, M.	Preliminary report of an unusual finding in the blood of cyclotron workers.	4/25/49
UR-99	Davis, R.W. Dole, N. Izzo, M.J. Young, L.E.	"Hemolytic" effect of radiation. (<u>J. Lab. Clin. Med.</u> 35:528-537, 1950)	11/15/49
UR-121	Ingram, M. Mason, W.B.	The effects of chronic exposure to roentgen radiation on the peripheral blood of experimental animals. (NNES Div. VI, vol.2, chap.11)	7/17/50
UR-122	Ingram, M. Mason, W.B.	The effects of acute exposure to roentgen radiation on the peripheral blood of experimental animals. (NNES Div. VI, vol.2 chap.3)	7/17/50
UR-127 p.28-31	Furth, F.W. Shrier, J.	Effect of aureomycin on coagulation time.	8/1/50
UR-127 p.38-40	Ingram, M.	The incidence of unusual lymphocytes in the blood of dogs exposed to radiation from the 130 inch cyclotron.	8/1/50
UR-137	Ingram, M. Barnes, S.W.	Experimental confirmation of a previously reported unusual finding in the blood of cyclotron workers. (<u>Science</u> 113:32-34, 1951)	10/10/50
UR-141	Furth, F.W. Shrier, J. Howland, J.W.	Effect of aureomycin on coagulation time.	11/2/50
UR-152 p.59-64	Ingram, M.	The occurrence of lymphocytes with bilobed nuclei in cyclotron personnel.	2/1/51
UR-159	Rekers, P.E. Salisbury, P. Miller, J. Marti, N. Papageorge's, N., Jr.	Cross circulation studies on the irradiated dog.	3/30/50

UR-189 p.8-15	Ingram, M. Coonan, L. Jespersen, J. Nielsen, G. Piatt, D. Wright, M.	Cytological studies on the blood of Sally, an Indian elephant.	10/25/51
UR-200 p.36-53	Ingram, M. Nielsen, G. Piatt, D.	Bone marrow studies on spleen shielded and non-shielded dogs exposed to an LD90-100 dose of x-rays.	2/11/52
UR-205 p.48-56	Ingram, M. Adams, M.	Studies relative to the phagocytic activity of leukocytes in irradiated dogs.	5/14/52
UR-211	Ingram, M. Adams, M. Coonan, L. Jespersen, J. Nielsen, G. Piatt, D. Yettewich, G.	The occurrence of lymphocytes with bilobed nuclei in cyclotron personnel.	6/16/52
UR-213 p.66	Hurwitz, L. DiStefano, V.	Effect of EPN (ethyl p-nitrophenyl thionobenzenephosphonate) on human red blood cell cholinesterase. (<u>Federation Proc.</u> 11:359, 1952)	7/31/52
MDDC-217	Lawrence, J.S. Valentine, W.N.	The blood platelets: the rate of their utilization in the cat. (<u>Blood</u> 2:40-49, 1947) (NNES Div.VI, vol.2, chap.5b)	
MDDC-824	Suter, G.M.	Response of hematopoietic system to x-rays.	3/22/47
	Field, J.R.	Prothrombin activity in rats with mammary tumors. (<u>Cancer Research</u> 8:172-176, 1948)	
MDDC-853	Lawrence, J.S. Dowdy, A.H. Valentine, W.N.	The effect of radiation on hemopoiesis. (<u>Radiology</u> 51:400-413, 1948)	
MDDC-326	Lawrence, J.S. Valentine, W.N. Dowdy, A.H.	The effect of radiation on hemopoiesis. Is there an indirect effect? (<u>Blood</u> 3:593-611, 1948) (NNES Div.VI, vol.2, chap.5a)	
AECU-334	Ingram, M. Barnes, S.W.	Observations on the blood of cyclotron workers. (<u>Phys. Rev.</u> 75:1765-1766, 1949; <u>Nuclear Sci. Abs.</u> 3-507, 1949)	
	Young, L.E. Ervin, D.M. Christian, R.M. Davis, R.W.	Hemolytic disease in newborn dogs following isoimmunization of the dam by transfusions. (<u>Science</u> 109:630-631, 1949)	

Davis, R.W.
Christian, R.M.
Ervin, D.M.
Young, L.E.

Pernicious anemia in childhood. Report of
a case in six year old girl responding to
refined liver extract, folic acid and
vitamin B₁₂ in successive relapses. (Blood
4:1361-1366, 1949)

INDUSTRIAL HYGIENE - INSTRUMENTS AND METHODS

M-1526	Murphy, N.	Calibration of Chrysler pump.	7/14/44
UR-24 AECD-2028	LaBelle, C. Booth, C. Barrett, R.	The retention of uranium dioxide in rabbits. (NNES Div.VI, vol.1, chap.21-B)	4/19/48
UR-45 p.77-90	Laskin, S. Meier, D.W. Wilson, R.H.	Experimental standard chamber.	10/15/48
UR-87 p.47-52	Laskin, S. Frank, P. Meier, D.	Efficiency of sampling methods for the collection of toxic atmospheric impurities.	7/30/49
UR-96 p.77-85	Laskin, S. Frank, P. Meier, D. Wilson, R.	Efficiency of sampling methods for the collection of toxic atmospheric impurities.	11/3/49
UR-103 p.67-72	Laskin, S. Frank, P. Wilson, R.H.	Efficiency of sampling methods for the collection of toxic atmospheric impurities.	1/31/50
UR-103 p.72-75	Laskin, S. Wilson, R.H. Lauterbach, K.E. Leach, L.J. Falconer, D.W.	Production design of the Modified Cascade Impactor.	1/31/50
UR-103 p.75-78	Wilson, R.H. Laskin, S. Meier, D.W.	A new design for an oscillating thermal precipitator.	1/31/50
UR-116 p.80-86	Wilson, R.H. Laskin, S.	Improved design for an animal inhalation exposure unit.	4/27/50
UR-126	Laskin, S.	Oscillating thermal precipitator.	7/24/50
UR-127 p.45-50	LaBelle, C.W. Dohl, J.M.	Radioactive dust as a tracer in the study of lung transport mechanisms. I. Analytical methods.	8/1/50
UR-129	Laskin, S.	The Modified Cascade Impactor. (U.S. Tech. Conf. Air pollution monograph, July 1950)	8/8/50
UR-130	Laskin, S. Wilson, R.H. Lauterbach, K.E. Leach, L.J. Falconer, D.W.	Production design of the Modified Cascade Impactor.	8/8/50
UR-182	Morrow, P.E.	A new pneumotachograph and its application to a study of human and canine respiration.	8/29/51 UR 00366

UR-189 p.61-69	Simon, G.A. Laskin, S.	An instrument for continuous sampling and recording of airborne dust concentration.	10/25/51
UR-189 p.70-73	Simon, G.A.	Photomultiplier circuit for airborne dust sampling instrument.	10/25/51
UR-199	Lauterbach, K.E. Wilson, R.H. Laskin, S. Meier, D.W.	Design of an oscillating thermal precipitator.	4/25/52
UR-213 p.65	Morrow, P.E.	A portable pneumotachograph and its application to a study of human and canine respiration. (<u>Federation Proc.</u> 11:423, 1952)	7/31/52
UR-222 p.54	Morrow, P.E.	Pneumotachography in the study of respiratory dysfunctions. (Abstract)	11/3/52
MDDC-1500	Laskin, S. Frank, P. Laskin, S. Wilson, R.H.	Modified Cascade Impactor. (drawings) Efficiency of filter paper method. (<u>Ind. Hyg. Newsletter</u> , July 1950)	10/13/47

PROGRESS REPORTS

M-1500 Progress report for period ending June 15, 1943.
 M-1501 Progress report (construction) for period ending June 30, 1943.
 M-1502 Progress report for period ending July 31, 1943.
 M-1503 Progress report for period ending August 31, 1943.
 M-1504 Progress report (medical research) for period ending August 31, 1943.
 M-1505 Progress report for period ending September 30, 1943.
 M-1506 Progress report (medical research) for period ending October 31, 1943.
 M-1507 Progress report for period ending November 30, 1943.

	<u>DIVISION AND SECTION REPORTED*</u>	<u>PERIOD COVERED</u>
M-1509	Whole project.	January 1944
M-1511	Whole project.	February 1944
M-1514	Whole project.	March 1944
M-1515	Whole project.	April 1944
M-1516	Whole project.	January 1 to April 1, 1944
M-1520	Radiation Division.	May 1944
M-1521	Radioactivity Division.	May 1944
M-1522	Pharmacology Division.	May 1944
M-1530	Radiation.	June 1944
M-1531	Radioactivity.	June 1944
M-1533	Pharmacology. Mechanism.	June 1944
M-1534	General Divisions.	June 1944
M-1536	Radiation.	July 1944
M-1537	Radioactivity.	July 1944
M-1539	Pharmacology. Mechanism.	July 1944

*For Chart of Organization June 1943 to July 1946 see NNES Div. VI, vol.1, p.1061.

M-1540	General Divisions.	July 1944
M-1544	Radiation.	August 1944
M-1545	Radioactivity.	August 1944
M-1546	Special Divisions.	August 1944
M-1549	Pharmacology.	August 1944
M-1557	Radioactivity.	September 1944
M-1559	Radiation.	September 1944
M-1558	Special Divisions.	September 1944
M-1561	Pharmacology.	September 1944
M-1571	Radiation.	October 1944
M-1572	Radioactivity.	October 1944
M-1573	Special Divisions.	October 1944
M-1575	Pharmacology. Mechanism.	October 1944
M-1584	Radiation.	November 1944
M-1589	Special Divisions.	November 1944
M-1591	Radiation. Research.	November 1944
M-1593	Pharmacology. Summary of research.	November 1944
M-1594	Pharmacology. Physiology.	November 1944
M-1595	Pharmacology. Toxicology.	November 1944
M-1596	Pharmacology. Engineering.	November 1944
M-1597	Pharmacology. Biochemistry.	November 1944
M-1598	Pharmacology. Analytical chemistry.	November 1944
M-1600	Special Problems.	December 1944
M-1605	Pharmacology. Summary of research.	December 1944
M-1606	Pharmacology. Inhalation. Part a.	December 1944
M-1607	Pharmacology. Inhalation. Part b.	December 1944
M-1609	Pharmacology.	December 1944
M-1611	Pharmacology. Physiology.	December 1944

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M-1612	Pharmacology. Engineering.	December 1944
M-1613	Pharmacology.	December 1944
M-1614	Enumerative reports.	December 1944
M-1615	Pharmacology. Analytical Chemistry	December 1944
M-1616	Special Divisions. Research	December 1944
M-1617	Radiation. Enumerative reports.	December 1944
M-1618	Special Divisions. Research.	January 1945
M-1619	Pharmacology. Engineering.	January 1945
M-1620	Pharmacology. Physiology.	January 1945
M-1621	Radioactivity.	January 1945
M-1622	Special Divisions. Enumerative.	January 1945
M-1623	Pharmacology. Enumerative	January 1945
M-1624	Radiation. Enumerative.	January 1945
M-1625	Pharmacology. Biochemistry.	January 1945
M-1626	Pharmacology. Summary.	January 1945
M-1627	Pharmacology. Inhalation studies.	January 1945
M-1628	Pharmacology. Inhalation.	January 1945
M-1629	Pharmacology. Toxicology.	January 1945
M-1630	Pharmacology. Analytical chemistry.	January 1945
M-1634	Radioactivity.	February 1945
M-1635	Pathology.	February 1945
M-1636	Special Divisions. Enumerative.	February 1945
M-1637	Pharmacology. Summary.	February 1945
M-1638	Pharmacology. Inhalation.	February 1945
M-1639	Pharmacology. Toxicology.	February 1945
M-1640	Pharmacology. Engineering.	February 1945
M-1641	Pharmacology. Physiology.	February 1945
M-1642	Pharmacology. Biochemistry.	February 1945

M-1643	Pharmacology. Analytical chemistry.	February 1945
M-1644	Pharmacology. Biochemistry.	February 1945
M-1645	Pharmacology. Enumerative.	February 1945
M-1646	Radiation. Enumerative.	February 1945
M-1660	Radiation. Enumerative.	February 1945
M-1662	Radioactivity.	March 1945
M-1663	Pharmacology. Summary.	March 1945
M-1664	Pharmacology. Inhalation.	March 1945
M-1665	Pharmacology. Engineering.	March 1945
M-1666	Pharmacology. Analytical chemistry.	March 1945
M-1667	Pharmacology. Pharmacology section.	March 1945
M-1668	Pharmacology. Mechanism.	March 1945
M-1669	Pharmacology. Enumerative.	March 1945
M-1670	Special Divisions. Enumerative.	March 1945
M-1671	Special Sections.	March 1945
M-1680	Radioactivity.	April 1945
M-1681	Special Divisions. Enumerative.	April 1945
M-1682	Special Research.	April 1945
M-1683	Pharmacology. Summary.	April 1945
M-1684	Pharmacology. Engineering.	April 1945
M-1685	Pharmacology. Analytical chemistry.	April 1945
M-1686	Pharmacology. Inhalation.	April 1945
M-1687	Pharmacology. Pharmacology section.	April 1945
M-1688	Pharmacology. Mechanism.	April 1945
M-1689	Pharmacology. Enumerative.	April 1945
M-1693	Radiation.	April 1945
M-1699	Radiation.	May 1945
M-1700	Radioactivity.	May 1945

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M-1701	Pharmacology. Summary of research.	May 1945
M-1702	Pharmacology. Inhalation.	May 1945
M-1703	Pharmacology. Engineering.	May 1945
M-1704	Pharmacology. Analytical research.	May 1945
M-1705	Pharmacology.	May 1945
M-1706	Pharmacology. Mechanism.	May 1945
M-1707	Pharmacology. Enumerative.	May 1945
M-1708	Special Divisions.	May 1945
M-1709	Special Research.	May 1945
M-1727	Radioactivity.	June 1945
M-1728	Special Divisions.	June 1945
M-1729	Special Research.	June 1945
M-1731	Radiation.	June 1945
M-1732	Pharmacology. Summary of research.	June 1945
M-1733	Pharmacology. Inhalation.	June 1945
M-1734	Pharmacology. Engineering.	June 1945
M-1735	Pharmacology. Analytical.	June 1945
M-1736	Pharmacology. Pharmacology Section.	June 1945
M-1737	Pharmacology. Mechanism.	June 1945
M-1738	Pharmacology. Enumerative.	June 1945
M-1741	Radiation.	July 1945
M-1742	Special Problems.	July 1945
M-1743	Special Divisions.	July 1945
M-1744	Special Research.	July 1945
M-1747	Pharmacology. Summary of research.	July 1945
M-1748	Pharmacology. Inhalation.	July 1945
M-1749	Pharmacology. Engineering.	July 1945

M-1750	Pharmacology. Analytical research.	July 1945
M-1751	Pharmacology. Pharmacology section.	July 1945
M-1752	Pharmacology. Mechanism.	July 1945
M-1753	Pharmacology. Enumerative.	July 1945
M-1757	Radiation.	August 1945
M-1758	Special Problems.	August 1945
M-1759	Pharmacology. Summary of research.	August 1945
M-1760	Pharmacology. Inhalation.	August 1945
M-1761	Pharmacology. Analytical.	August 1945
M-1762	Pharmacology. Pharmacology section.	August 1945
M-1763	Pharmacology. Mechanism.	August 1945
M-1764	Pharmacology. Enumerative.	August 1945
M-1765	Special Divisions.	August 1945
M-1766	Pathology.	August 1945
M-1774	Radiation.	September 1945
M-1775	Special Problems.	September 1945
M-1776	Pharmacology. Summary of research.	September 1945
M-1777	Pharmacology. Inhalation.	September 1945
M-1778	Pharmacology. Mechanism.	September 1945
M-1779	Pharmacology. Analytical research.	September 1945
M-1780	Pharmacology. Pharmacology section.	September 1945
M-1781	Pharmacology. Mechanism.	September 1945
M-1782	Pharmacology. Enumerative.	September 1945
M-1783	Special Divisions.	September 1945
M-1784	Special Research.	September 1945
M-1787	Radiation.	October 1945
M-1788	Special Problems.	October 1945

M-1789	Pharmacology. Inhalation.	October 1945
M-1790	Pharmacology. Analytical research.	October 1945
M-1791	Pharmacology. Pharmacology section.	October 1945
M-1792	Pharmacology. Enumerative.	October 1945
M-1793	Special Divisions.	October 1945
M-1800	Radiation.	November 1945
M-1801	Special Problems.	November 1945
M-1802	Pharmacology. Summary of research.	November 1945
M-1803	Pharmacology. Inhalation.	November 1945
M-1804	Pharmacology. Analytical research.	November 1945
M-1805	Pharmacology. Pharmacology section.	November 1945
M-1806	Pharmacology. Mechanism.	November 1945
M-1807	Pharmacology. Enumerative.	November 1945
M-1808	Special Divisions.	November 1945
M-1809	Special Research.	November 1945
M-1816	Radiation.	December 1945
M-1817	Radioactivity.	December 1945
M-1818	Pharmacology. Summary of research.	December 1945
M-1819	Pharmacology. Inhalation.	December 1945
M-1820	Pharmacology. Analytical.	December 1945
M-1821	Pharmacology. Pharmacology section.	December 1945
M-1822	Pharmacology. Enumerative.	December 1945
M-1823	Special Divisions.	December 1945
M-1830	Radiation.	January 1946
M-1831	Special Problems.	January 1946
M-1832	Special Divisions.	January 1946
M-1834	Special Research.	January 1946

M-1839	Pharmacology. Inhalation.	January 1946
M-1840	Pharmacology. Summary of research.	January 1946
M-1841	Pharmacology. Analytical.	January 1946
M-1842	Pharmacology. Pharmacology section.	January 1946
M-1843	Pharmacology. Enumerative.	January 1946
M-1847	Radiation.	February 1946
M-1848	Special Problems.	February 1946
M-1849	Special Divisions.	February 1946
M-1850	Special Research.	February 1946
M-1851	Pharmacology. Inhalation.	February 1946
M-1852	Pharmacology. Summary of Research.	February 1946
M-1853	Pharmacology. Analytical.	February 1946
M-1854	Pharmacology. Pharmacology section.	February 1946
M-1855	Pharmacology. Enumerative.	February 1946
M-1856	Radiation.	March 1946
M-1857	Pharmacology. Summary of research.	March 1946
M-1858	Pharmacology. Inhalation.	March 1946
M-1859	Pharmacology. Analytical.	March 1946
M-1860	Pharmacology. Pharmacology section.	March 1946
M-1861	Pharmacology. Enumerative.	March 1946
M-1862	Special Problems.	March 1946
M-1863	Special Divisions.	March 1946
M-1865	Pharmacology. Summary of research.	April 1946
M-1866	Pharmacology. Inhalation.	April 1946
M-1867	Pharmacology. Analytical.	April 1946
M-1868	Pharmacology. Pharmacology section.	April 1946
M-1869	Pharmacology. Enumerative.	April 1946
M-1870	Special Research. 1. Spectrochemistry.	April 1946

M-1871	Radiation.	April 1946
M-1872	Special Divisions.	April 1946
M-1875	Special Problems.	April 1946
M-1879	Pharmacology. Inhalation.	May 1946
M-1880	Special Problems.	May 1946
M-1881	Radiation.	May 1946
M-1882	Special Divisions.	May 1946
M-1884	Radiology and Biophysics	July 1946
M-1886	Special Problems.	June 1946
M-1887	Pharmacology. Chemistry.	June 1946
M-1888	Special Divisions.	June 1946
M-1894	Pharmacology. Inhalation.	June-July 1946
M-1895	Pharmacology. Chemistry.	July 1946
M-1896	Special Divisions.	July 1946
M-1906	Pharmacology. Chemistry.	August 1946
M-1907	Special Divisions.	August 1946
M-1910	Pharmacology. Analytical.	May 1946
M-1911	Pharmacology. Enumerative.	July 1946
M-1912	Pharmacology. Enumerative.	August 1946
M-1914	Radiology and Biophysics.	September 1946
M-1915	Pharmacology. Summary of research.	September 1946
M-1916	Pharmacology. Industrial hygiene.	September 1946
M-1917	Pharmacology. Analytical chemistry.	September 1946
M-1918	Pharmacology. Biochemistry.	September 1946
M-1919	Pharmacology. Ingestion toxicity.	September 1946
M-1920	Special Divisions.	September 1946
M-1921	Diversified Problems.	October 1946

M-1923	Pharmacology.	October 1946
M-1924	Pharmacology. Enumerative.	October 1946
M-1925	Research Services.	October 1946
M-1927	Diversified Problems.	November 1946
M-1929	Pharmacology.	November 1946
M-1930	Pharmacology. Enumerative.	November 1946
M-1931	Research Services.	November 1946
M-1934	Diversified Problems.	December 1946
M-1936	Pharmacology.	December 1946
M-1937	Pharmacology. Enumerative.	December 1946
M-1938	Research Services.	December 1946
M-1944	Diversified Problems.	January 1947
M-1946	Pharmacology.	January 1947
M-1947	Pharmacology. Enumerative.	January 1947
M-1948	Research Services.	January 1947
M-1953	Diversified Problems.	February 1947
M-1955	Pharmacology.	February 1947
M-1956	Pharmacology. Enumerative.	February 1947
M-1957	Research Services.	February 1947
M-1959	Diversified Problems.	March 1947
M-1961	Pharmacology.	March 1947
M-1962	Pharmacology. Enumerative.	March 1947
M-1963	Research Services.	March 1947
M-1967	Diversified Problems.	April 1947
M-1969	Pharmacology.	April 1947
M-1970	Pharmacology. Enumerative.	April 1947
M-1971	Research Services.	April 1947
M-1973	Radiology and Biophysics.	May 1947

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M-1975	Pharmacology. Enumerative.	May 1947
M-1976	Research Services.	May 1947
M-1987	Pharmacology. Enumerative.	June 1947
M-1988	Research Services.	June 1947

QUARTERLY TECHNICAL REPORTSPERIOD COVERED

M-2002	July 1 to September 30, 1947
M-2012	October 1 to December 31, 1947
UR-38	April 1 to June 30, 1948
UR-45	July 1 to September 30, 1948
UR-60	January 1, 1948 thru December 31, 1948
UR-70	January 1 thru March 31, 1949
UR-87	April 1 thru June 30, 1949
UR-96	July 1 thru September 30, 1949
UR-103	October 1 thru December 31, 1949
UR-116	January 1 thru March 31, 1950
UR-127	April 1 thru June 30, 1950
UR-142	July 1 thru September 30, 1950
UR-152	October 1 thru December 31, 1950
UR-164	January 1 thru March 31, 1951
UR-174	April 1 thru June 30, 1951
UR-189	July 1 thru September 30, 1951
UR-200	October 1 thru December 31, 1951
UR-205	January 1 thru March 31, 1952
UR-213	April 1 thru June 30, 1952
UR-222	July 1 thru September 30, 1952

RADIATION INSTRUMENTS AND DOSIMETRY

M-1525 A AECD-2278	Dessauer, G. Lennox, E.	Photographic neutron dosimetry to date.	7/14/44
M-1525 B MDDC-1484	Dessauer, G.	A portable micro-r meter. Report on its development and description of its final form.	7/14/44
M-1535	Enns, T.	Ion chamber - electrometer for alpha particle determination.	n.d.
M-1552	Bale, W.F.	Report on Instrument Meeting in Eckhard Hall, Chicago, September 14-15, 1944.	9/26/44
M-1560	Gilda, J.E.	Directions for operation of Picker-Waite x-ray diffraction unit.	n.d.
M-1578	Dessauer, G.	Film monitoring of gamma rays on human body. Report on laboratory experiments and practical experiences at a certain warehouse.	11/2/44
M-1603 MDDC-1651	Bale, W.F.	Rochester ion meter. Construction and operation details.	1/18/45
M-1610	Bonner, J.F. Esler, F.	Portable Geiger-Mueller counter. Design and construction detail.	1/22/45
M-1656 AECD-1973	Dessauer, G. Rouvina, J.	Photographic neutron dosimetry II.	3/28/45
M-1771	Bonner, J.F. Esler, F.L.	The use of Potter type scaling circuit for radiation counters.	9/25/45
M-1772 AECD-1972	Dessauer, G. Davis, K.E. White, F.A.	A radiation dose integrator of high sensitivity.	9/13/45
M-1773 AECD-1856	Dessauer, G. White, F.A. Rouvina, J.	A pressure ionization chamber for the measurement of neutron fluxes at tolerance level in portable instruments.	10/16/45
M-1796	Esler, F. Bonner, J. Morcken, D.	Foil alpha counter.	12/10/45
UR-38 p.97-104	Mermagen, H.	Investigation of film behavior: preliminary report on the wavelength dependence of a photo-sensitive emulsion in terms of densities recorded for known radiation intensities.	7/15/48
UR-70 p.68-71	Mermagen, H.	Wavelength dependence of three photographic emulsions.]	4/25/49

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UR-70 p.87-89	Mermagen, H.	[Differential ionization chambers for measurement of neutron flux.]	4/25/49
UR-103 p.88-92	Mermagen, H.	Calculations of radium exposures for photographic sensitometry.	1/31/50
UR-127 p.75-82	Dahl, A.H.	Quality evaluation of x-ray beams by metal-walled ionization chambers.	8/1/50
UR-127 p.82-89	Kanwisher, J.W. Bale, W.F.	Ionizing radiation dosimeter.	8/1/50
UR-142 p.96-125	Whipple, G.H., Jr.	Fast neutron survey of the small cyclotron.	11/1/50
UR-152 p.76-99	Blakney, R.M. Davis, T.P. Krolak, L.J. Pearse, H.E.	Development of a copper sphere radio-meter.	2/1/51
UR-160	Vyverberg, R.G.	A quenching circuit for Geiger-Mueller counting of carbon 14 as carbon dioxide. (Thesis)	3/27/51
UR-164 p.96-97	Dahl, A.H. Vyverberg, R.G.	Use of commercially available G.M. tubes for counting C ¹⁴ .	5/9/51
UR-164 p.98-102	Roberts, C.J.	Phantom dog measurements.	5/9/51
UR-167	Kanwisher, J.W.	A chemical dosimeter for ionizing radiations. (Thesis)	8/29/51
UR-183	Hurak, J.B. Zizzo, S. Dahl, A.H.	Use of commercially available portable survey meters for emergency fission product monitoring of water supplies. (Nucleonics 9, no.5:8-16 - 8-20, 1951)	8/3/51
UR-189 p.56-60	Zizzo, S.G.	A cadmium sulfide crystal detector mounted in hypodermic needle for <u>in vivo</u> radiation studies.	10/25/51
MDDC-1420	Failla, G.	"Shielded contact" grounding key for electrometers.	10/14/47
AECD-2142	Failla, G. Rossi, H.E. Clark, R.K. Baily, N.	The measurement of tissue dose of ionizing radiation. I. Beta ray emitting isotopes uniformly distributed in a homogenous tissue.	11/10/47
AECD-1789	Bale, W.F.	Operation manual for Rochester ion meter.	2/6/48
1129923	Zizzo, S.G. Platt, J.B.	Detection of x-ray quanta by a cadmium sulphide crystal counter. (Phys. Rev. 76: 704-705, 1949)	

Bale, W.F.

The detection of radiation hazards: instruments
and personnel. (Radiology 56:656-660, 1951)

RADIOACTIVITY, MEASUREMENTS OF

M-1510	Bale, W.F.	Gamma ray activity of UX_1 , UX_2 separated from uranium metal.	3/44
M-2012 p.48-49	Hursh, J.B.	Back-scatter from silver foil samples.	1/15/48
UR-56 AECU-107	Bonner, J.F., Jr.	The half-life of Be^7 .	1/19/49
UR-96 p.57-65	LaBelle, C.W.	The distribution of radioactivity in pile filter dust as a function of particle diameter.	11/3/49
UR-164 p.90-95	Mermagen, H.	Activities of samples of precipitation following Nevada tests.	5/9/51
	Bale, W.F.	Determination of hard radiation, including preparation of samples. (Supplement to U. S. Naval Med. Bull. on Preparation and measurement of isotopes and some of their medical aspects, March-April 1948, p.100-103)	

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RESPIRATORS, TESTS OF

M-1512	Stokinger, H.E.	Tests of efficiency of respirators against uranium dusts.	4/11/44
M-1548	Stokinger, H.E.	Tests of efficiency of GMC canisters (for acid gases and organic vapors) in atmospheres of Compound 23 (Tribnol, Synthane) [boron trifluoride].	6/27/44
M-1555	Dygert, P. Sanford, R.A.C.	Tests of efficiency of 5 respiratory protective devices in atmospheres of 890 (Tribnol complex) [dimethyl ether boron trifluoride complex].	9/22/44
M-1580	Dygert, H.P. Oberger, H. Stokinger, H.E.	Relative efficiencies of the filter paper mask sampler and the glass electrostatic precipitator in determining the acceptability of respiratory protective devices in uranium dust atmospheres. Final report.	10/22/44
M-1588	Sanford, R.	Test of efficiency of a respiratory protective device against a toxic atmosphere of C-216 [fluorine].	11/11/44
M-1602	Stokinger, H.E.	Final report: UO ₂ F ₂ inhalation study. A 37-day study at a mean concentration of 12.2 mg/m ³ of the A. Toxic effects of inhalation by laboratory animals. B. Tests of efficiency of respiratory protective devices.	8/44
M-1647	Sanford, R.	Tests of efficiency of five respiratory protective devices in atmospheres containing Tribnol [dimethyl ether boron trifluoride complex].	2/45
M-1648	Dygert, H.P. Cohenour, L.B. Tarbell, A.	Amount of uranium and C-216 [fluorine] retained in U.S. Army Assault Mask Canisters containing "Whitlerite" used for short periods in high concentrations of C-616 [UF ₆].	2/45
M-1649	Sanford, R.	Tests of efficiency of two respiratory protective devices in atmospheres of C-216 [fluorine].	2/45
M-1650	Sanford, R.	Tests of efficiency of 4 respiratory protective devices in atmospheres of UO ₂ F ₂ and HF produced by the hydrolysis of UF ₆ .	2/45
M-1654	Stokinger, H.E.	U ₃ O ₈ one-month study at a mean concentration of 17 mg/m ³ of the A. Toxic effects of inhalation by laboratory animals and B. Test of efficiency of respirators.	3/45

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M-1676	Dygert, H.P. Cherg, E. Sanford, R	Annual report. Tests of respiratory protective devices in atmospheres containing uranium and C-216 [fluoride] compounds.	1/45
M-1677	Stokinger, H.E.	UO₂. A 30-day study at a mean concentration of 22.0 mg per cubic meter. A. Toxic effects of inhalation by laboratory animals. B. Tests of efficiency of respiratory protective devices.	2/45
M-1697	Sanford, R.	Tests of efficiency of 3 mask canisters in atmospheres containing C-716 [perfluoroheptane] and C-816 [perfluorooctane].	5/45
M-1904	Dygert, H.P. Cherg, H.A.	A 34-day inhalation study at a mean concentration of 21 mg of uranium nitrate UO ₂ (NO ₃) ₂ ·6H ₂ O and tests of respiratory protective devices in atmospheres of UO ₂ (NO ₃) ₂ ·6H ₂ O.	9/46

TOXICITY OF BERYLLIUM

M-1996 AECD-1803	Hodge, H.C., et al.	Beryllium Symposium at the University of Rochester School of Medicine and Dentistry, 10 and 11 December 1946.	12/11/46
M-1996 part A	Hardy, H.L.	New clinical syndrome: delayed chemical pneumonitis occurring in workers exposed to beryllium compounds.	
M-1996 part B	Grier, R.S.	Acute pulmonary beryllium poisoning, six cases.	
M-1996 part C	Dailey, M.E.	A questionable case of beryllium poisoning.	
M-1996 part D	Turner, R.A.N.	Hazards of the beryllium industry.	
M-1996 part E	DeNardi, J.	Case histories and x-rays, lost-time records, descriptions of beryllium poison- ing.	
M-1996 part F	Shilen, J.	Descriptions of certain processes and compounds involved in beryllium manufacture.	
M-1996 part G	Scott, J.K.	Thirteen case histories.	
M-1997	Hodge, H.C., et al.	Progress report of preliminary studies of beryllium toxicity.	9/1/47
M-1997 paper 3 MDDC-1237	Scott, J.K.	The pathological anatomy of acute experi- mental beryllium poisoning; peripheral blood changes resulting from intravenous administration of beryllium sulfate. (<u>Arch. Path.</u> , 45:354-359, 1948)	
M-1997 paper 4 MDDC-1233	Maynard, E.A. Downs, W.L. Hodge, H.C.	Certain aspects of the acute toxicity of beryllium following intraperitoneal injection.	
M-1997 paper 5 MDDC-1234	Maynard, E.A. Downs, W.L. Hodge, H.C.	Preliminary data on rat feeding with beryllium.	
M-1997 paper 6 MDDC-1232	LaBelle, C.W. Cucci, M.R.	Preliminary studies in the toxicity of beryllium; the effect of intratracheal injection of beryllium in experimental animals.	
M-1997 paper 7 MDDC-1318	Sprague, G.F. LaBelle, C.W. Pettengill, A.G. Stokinger, H.E.	Initial studies of the inhalation toxicity of beryllium sulfate and beryllium metal fume.	

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UR-27 AECD-2280	Hodge, H.C. Howland, J.W. Laskin, S. Maynard, E.A. Neuman, W.F. Rothstein, A. Scott, J.K. Stokinger, H.E.	An outline of a beryllium program.	5/6/48
UR-31 AECD-2102	Sprague, G.F.	Initial studies of the inhalation toxicity of beryllium sulfate tetrahydrate dust.	5/17/48
UR-35 AECD-2104	Allen, R. Bonner, G. Sparks, A. Neuman, W.F. Scott, J.K. Kosel, G.	The distribution and excretion of a soluble beryllium compound using Be_7 as a tracer.	6/2/48
UR-38 p.45-47	Lauterbach, K. Laskin, S.	Particle surface area determinations of various grades of beryllium oxide.	7/15/48
UR-38 p.47-58	Sprague, G.F. Stokinger, H.E. LaBelle, C.W. Neuman, W.F. Allen, R.P. Maynard, E.A. Downs, W.L.	Concentration toxicity, intravenous injection. Pilot beryllium oxide (grade "A") inhalation study. Acute, massive exposures to beryllium oxide and hydroxide. Acute toxicity of beryllium by intraperitoneal route. Acute toxicity by ingestion. Radiographic findings in tibial head. Chronic toxicity by ingestion. Effect of injected beryllium on number of offspring in rats.	7/15/48
UR-38 p.58-63	Spiegel, C.J. Stokinger, H.E. Ackerman, H. Neuman, W.F. Neuman, M.W. Rothstein, A. Hurwitz, L.	Change in blood lipid ratios as index of beryllium poisoning. Effect of superimposed beryllium exposure on tuberculosis in guinea pigs. Effect of beryllium on isolated cells. Mechanism of the deposition of beryllium in bone.	7/15/48
UR-38 p.105-132	Howland, J.W. Waterhouse, C. Keutmann, E.H. Bruce, R.A.	[Metabolic studies of patients with chronic pulmonary granulomatosis of beryllium workers.]	7/15/48
UR-43 AECD-2391	Bruce, R.A. Lovejoy, F.W., Jr. Brothers, G.B. Velasquez, T.	Observations on the causes of dyspnea in chronic pulmonary granulomatosis in beryllium workers.	10/20/48
UR-45 p.56-62	Ashenburg, N.J. Sprague, G.F. Stokinger, H.E.	The inhalation toxicity of beryllium sulfate hexahydrate mist in animals at a concentration of 10 mg/m^3 for 95 days. The combined effect of inhalation of hydrogen fluoride gas and beryllium sulfate aerosol in rats.	10/15/48

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UR-45 p. 62-65	Maynard, E.A. Downs, W.L.	Intraperitoneal injection, beryllium oxide suspensions. Intraperitoneal toxicity of beryllium oxide in rats. Pilot experiments on the oral toxicity in dogs of beryllium oxides.	10/15/48
UR-45 p. 66	Neuman, W.F. Allen, R.P. Scott, J.K.	Distribution and excretion of beryllium using Be_7 as a tracer.	10/15/48
UR-45 p. 66-68	Spiegl, C.J. LaFrance, L.J.	Changes in blood lipid ratios as an index of beryllium poisoning.	10/15/48
UR-45 p. 68-71	Stokinger, H.E.	Rutin as a prophylactic and therapeutic agent in beryllium poisoning in dogs.	10/15/48
UR-63 AECU-154	Sprague, G. Meier, R. Pettengill, A. Smith, F. Scott, J. Stokinger, H.E.	Beryllium sulfate mist inhalation study at approximately 50 mg/m ³ .	2/16/49
UR-65 AECU-165	Sprague, G.F., Jr. Pettengill, A. Brown, B. Stokinger, H.E.	The inhalation toxicity of beryllium sulfate mist in animals at a concentration of 10 mg/m ³ for 95 days.	2/24/49
UR-68 AECU-244	Stokinger, H.E. Ashenburg, N.J. DeVoldre, J. Scott, J.K. Smith, F.A.	The enhancing effect of the inhalation of hydrogen fluoride vapor on beryllium sulfate poisoning in animals. (<u>Arch. Ind. Hyg. Occupational Med.</u> 1:398-410, 1950)	4/13/49
UR-70 p. 32-35	Gosselin, R.	An observation on the colloidal nature of BeO in serum.	4/25/49
UR-70 p. 35-39	Hall, R.H. Root, R.E. Stokinger, H.E.	Response of animals to inhalation of beryllium oxide.	4/25/49
UR-70 p. 39-40	Maynard, E.A. Downs, W.L.	Acute intraperitoneal toxicity of beryllium acetate. Tooth changes following ingestion of a diet containing beryllium sulfate ($BeSO_4 \cdot 6H_2O$).	4/25/49
UR-70 p. 41-45	Erickson, J.O. Spiegl, C.J.	Skin sensitization to beryllium compounds. Phospholipid and cholesterol analyses of red blood cells in acute experimental beryllium poisoning.	4/25/49
UR-70 p. 72-81	Howland, J.W. Waterhouse, C. Keutmann, E.H. Bruce, R.A.	[Nitrogen metabolism in a patient with chronic beryllium poisoning - a three month study.]	4/25/49

UR-84 AECU-568	Hall, R.H. Ashenburg, N.J. Pettengill, A. Scott, J.K. Spiegl, C.J. Smith, F.A. Steadman, L.T. Laskin, S. Stokinger, H.E.	The inhalation toxicity of beryllium sulfate mist at a concentration of 1 mg/m ³ for 100 days.	6/25/49
UR-87 p.26-29	Hall, R.H.	Toxicity of inhaled beryllium fluoride.	7/30/49
UR-87 p.29-40	Stokinger, H.E.	Production of anemia in acute experimental beryllium poisoning.	7/30/49
UR-96 p.71-73	Spiegl, C.J.	Changes in blood lipid ratios as an index of beryllium poisoning.	11/3/49
UR-96 p.73-76	Stokinger, H.E.	Beryllium content of tissues following recovery from acute experimental beryllium poisoning.	11/3/49
UR-101	Waterhouse, C. Keutmann, E.H. Howland, J.W. Bruce, R.A.	Metabolic and cardio-respiratory studies on patients with beryllium granulomatosis.	11/18/49
UR-103 p.37-41	Hall, R.H.	Inhalation toxicity of beryllium fluoride mist.	1/31/50
UR-103 p.41-50	Stokinger, H.E. Root, R.E. Steadman, L.T.	Retention of beryllium tissues following inhalation.	1/31/50
UR-103 p.51-54	Spiegl, C.J.	Changes in urinary uric acid: creatinine ratios as an index of beryllium poisoning.	1/31/50
UR-116 p.55-74	Hall, R.H. Stokinger, H.E. Root, R.E. Steadman, L.T. Stroud, C. Alling, E. Smith, F.A. Scott, J.K.	(Animal inhalation exposure of BeF₂ mist - 2 mg/m³.	4/27/50
UR-116 p.75-79	Stokinger, H.E. Root, R.E. Steadman, L.T.	Retention of beryllium in tissues following inhalation. II. Effect of diet on deposition and retention in rats.	4/27/50
UR-118	Bruce, R.A. Lovejoy, F.W., Jr. Yu, Nan Gan Pearson, R.	Further observations on the pathological physiology of chronic granulomatosis associated with beryllium workers.	5/18/50

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UR-125	Scott, J.	The experimental production of tolerance and osteosclerosis by repeated intravenous injections of beryllium sulphate.	7/17/50
UR-127 p.55-60	Smith, F.A. Stokinger, H.E. Steadman, L.T. Gardner, D.E.	Deposition of fluoride and beryllium in animal tissues following exposure to $2 \text{ mg BeF}_2/\text{m}^3$.	8/1/50
UR-142 p.56-71	Stokinger, H.E. Steadman, L.T. Smith, F.A. Root, R.E.	BeF_2 mist inhalation study in animals at $2 \text{ mg}/\text{m}^3$.	11/1/50
UR-171	Underwood, A.L., Jr.	Studies on the renal excretion of beryllium. (<u>Proc. Soc. Exptl. Biol. Med.</u> 79:97-99, 1952)	6/4/51
UR-174 p.104-116	Leach, L.J. Laskin, S. Lauterbach, K.E.	Experimental production and studies of a beryllium oxide fume.	7/31/51
UR-174 p.117-120	Gosselin, R.E.	The failure of hexametaphosphate to influence the renal excretion of radio-beryllium (Be^7).	7/31/51
UR-177	Hall, R.H. Steadman, L.T. Stroud, C.A. Scott, J.K. Smith, F.A. Stokinger, H.E.	Acute toxicity of inhaled beryllium. IV. Studies of beryllium fluoride at concentrations of 10 and 1 mg/m^3 .	7/17/51
UR-205 p.3-5	Root, R. Spiegl, C.J. Stokinger, H.E. et al.	Interim report on two-year experimental inhalation studies of BeSO_4 at a level of $4 \text{ ug Be}/\text{m}^3$.	5/14/52
UR-213 p.53	Feldman, I. Neuman, W.F. Havill, J.R. Danley, R.A.	Concerning the role of citrate in the transport of beryllium by the blood. (Abstract)	7/31/52
UR-222 p.52	Spiegl, C.J.	Selected blood and urine changes in experimental beryllium poisoning. (Abstract)	11/3/52
UR-225	Spiegl, C.J. LaFrance, L.J. Ashworth, B.J.	Selected blood and urine changes in experimental beryllium poisoning.	10/31/52
M-355	Eisenbud, M. Berghout, C.F. Steadman, L.T.	Environmental studies in plants and laboratories using beryllium: the acute disease. (<u>J. Ind. Hyg. Toxicol.</u> 30:281-285, 1948)	

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- AECU-201
NYOO-53 Eisenbud, M.
Wanta, R.C.
Dustan, C.
Steadman, L.T.
Harris, W.B.
Wolf, B.S. Non-occupational berylliosis. (J. Ind. Hyg. Toxicol. 31:282-294, 1949)
- AECU-744 Maynard, E.A.
Downs, W.L.
Scott, J.K. Bone and tooth lesions in the rat resulting from ingestion and intraperitoneal administration of beryllium compounds. (Federation Proc. 9:338, 1950; Nuclear Sci. Abs. 4-3627, 1950)
- Stokinger, H.E.
Sprague, G.F.
Hall, R.H.
Ashenburg, N.J.
Scott, J.K. Acute inhalation toxicity of beryllium. I. Four definitive studies of beryllium sulfate at exposure concentrations of 100, 50, 10 and 1 mg per cubic meter. (Arch. Ind. Hyg. Occupational Med. 1:379-393, 1950)
- Hall, R.H.
Scott, J.K.
Laskin, S.
Stroud, C.A.
Stokinger, H.E. Acute toxicity of inhaled beryllium. III. Observations correlating toxicity with the physicochemical properties of beryllium oxide dust. (Arch. Ind. Hyg. Occupational Med. 2:25-48, 1950)
- AECU-749 Stokinger, H.E.
Smith, F.A.
Spiegl, C.J.
Scott, J.K.
Stroud, C.A. Character of blood changes in acute experimental beryllium poisoning. (Nuclear Sci. Abs. 4-3628, 1950)
- AECU-851 Stokinger, H.E.
Steadman, L.T.
Root, R. Retention of beryllium in animal tissues following inhalation of its salts. (Arch. Ind. Hyg. Occupational Med. 3:422-423, 1951)
- Stokinger, H.E.
Stroud, C.A.
Root, R.E. Anemia in acute experimental beryllium poisoning. (J. Lab. Clin. Med. 38:173-182, Aug. 1951)

TOXICITY OF FLUORINE AND FLUORIDES

M-1528	Dale, P.P.	Addition of non-toxic amounts of fluorine (1 ppm as NaF) in domestic waters to provide protection against dental caries.	7/25/44
M-1657	Orcutt, J.A.	Local effects produced by application of 890 boron trifluoride dimethyl ether complex ₂ to the skin.	3/8/45
M-1658	Orcutt, J.A.	The effects of the presence of 891 [BF ₃] on the progress of healing of wounds.	3/8/45
M-1661	Orcutt, J.A. Smith, N.B.	The nature of the C-216 [fluorine] burn.	3/13/45
M-1673	Weil, C.S. Dygert, H.P.	891 [BF ₃] dust. A 30-day study. Mean concentration - 72.7 mg/m ³ . A. Toxicity of inhalation in mice. B. Tests of efficiency of respirator filter RM-2148.	1/45
M-1678	Weil, C.S. Horton, C. Bleasdale, J. Bishop, C.	Tribol. [BF ₃] A 29-day toxicological study at a theoretical concentration of 100 parts per million; toxic effects of inhalation by laboratory animals.	12/44
M-1716	Cobler, J.G.	Mortality data for animal inhalation exposures to C-216 [fluorine] and to H(C-216) [hydrogen fluoride].	5/23/45
M-1726	Weil, C.S. Horton, C. Laush, G.	890 [BF ₃]. A 30-day toxicological study at a metered concentration of 50 parts per million. Toxic effects of inhalation by laboratory animals.	4/45
M-1740	Weil, C.S.	Tribol. [BF ₃] The second 30-day toxicological study at metered concentration of 100 parts per million. Toxic effects of inhalation by laboratory animals.	6/45
M-1767	Maynard, E.A.	One-month experiment on the oral toxicity of CoF ₃ in rats.	7/16/45
M-1799	Weil, C.S.	Boron trifluoride. BF ₃ . A 30-day toxicological study at metered concentration of 15 parts/million.	11/45
M-1814	Eriksen, N.	A study of toxicological effects of the inhalation of gaseous fluorine at an approximate concentration of 8 mg/m ³ .	10/45
M-1825	Weil, C.S.	Boron trifluoride methyl ether complex. A 32-day toxicological study at a metered concentration of 20 parts/million.	10/45

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M-1827	Eriksen, N.	A study of toxicological effects of inhalation of gaseous fluorine at a concentration of approximately 25 mg/m ³ .	9/45
M-1844	Eriksen, N.	A 30-day study of toxicological effects of inhalation of gaseous hydrogen fluoride at a concentration of approximately 7 mg/m ³ .	12/45
M-1874	Eriksen, N.	A study of toxicological effects of inhalation of gaseous fluorine at a concentration of approximately 3 mg/m ³ .	10/45
M-1889	Eriksen, N.	A study of lethal effect of inhalation of gaseous fluorine (F ₂) at concentrations from 100 ppm to 10,000 ppm.	10/45
M-1890	Eriksen, N.	A 31-day study of toxicological effects of inhalation of gaseous fluorine at a concentration of approximately 0.8 mg/m ³ .	10/45
M-1940	Eriksen, N.	A 29-day study of the toxicological effects of the inhalation of gaseous hydrogen fluoride at a concentration of approximately 25 mg/m ³ .	12/45
M-1981	LaBelle, C.W.	Studies on toxicity of oxygen fluoride at levels of exposure from 10 to 0.1 ppm by volume.	1/45
UR-38 p. 69-71	Smith, F.A. Gardner, D.E. Maynard, E.A. Downs, W.L.	Acute and pilot feeding studies. (Fluoride) toxicity of sodium fluoride by ingestion.	7/15/48
UR-38 p. 72-75	Gardner, D.E. Neuman, W.F. Neuman, M.W.	Fluoride metabolism.	7/15/48
UR-45 p. 75	Smith, F.A. Maynard, E.A. Downs, W.L.	Fluoride: acute and pilot feeding studies.	10/15/48
UR-70 p. 51	Maynard, E.A. Downs, W.L.	Acute intraperitoneal toxicity of sodium fluoride.	4/25/49
UR-70 p. 52, 53	Maynard, E.A. Downs, W.L.	Acute toxicity of ammonium fluoride (NH ₄ F).	4/25/49
UR-70 p. 52, 54-56	Smith, F.A. Stokinger, H.E. Gardner, D.E.	[Total skeletal fluoride content of man.]	4/25/49
UR-70 p. 57-59	Smith, F.A. Stokinger, H.E. Gardner, D.E.	Effect of beryllium sulfate on the skeletal deposition of fluoride.	4/25/49
UR-70 p. 59-62	Smith, F.A. Stokinger, H.E.	Blood fluoride content following exposure to hydrogen fluoride.	4/25/49

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UR-70 p. 62-65	Smith, F.A. Stokinger, H.E. Gardner, D.E.	Normal blood and urine fluoride levels.	4/25/49
UR-77 AECU-406	Smith, F.A. Gardner, D.E.	A preliminary investigation of blood fluoride levels following exposure to hydrogen fluoride at a concentration of approximately 29 mg/m ³ .	5/25/49
UR-87 p. 42-46	Smith, F.A.	Acute and pilot feeding studies of sodium fluoride.	7/30/49
UR-103 p. 60	Maynard, E.A. Downs, W.L.	Acute oral toxicity of NaF in albino rats.	1/31/50
UR-103 p. 60-63	Smith, F.A. Gardner, D.E. Wing, D.	Fluoride content in human bone.	1/31/50
UR-127 p. 51-52	Smith, F.A. Gardner, D.E. DeVoldre, J. Root, R.E. Wing, D.	Blood fluoride levels following exposure to hydrogen fluoride.	8/1/50
UR-127 p. 52-55	Smith, F.A. Gardner, D.E.	Fluoride levels in blood and urine of industrial personnel.	8/1/50
UR-152 p. 106-108	Smith, F.A. Gardner, D.E.	Fluoride content of public water supplies.	2/1/51
UR-154	Smith, F.A.	An annotated bibliography of the literature on the pharmacology and toxicology of fluorine and its compounds. (1936-1950)	1/29/51
UR-154 Rev.	Smith, F.A. Cox, G.J.	A bibliography of the literature (1936-1952) on the pharmacology and toxicology of fluorine and its compounds, including effects on bones and teeth.	9/26/52
UR-164 p. 73-77	Maynard, E.A. Downs, W.L. LeSher, M.F.	Toxicity of some fluoride compounds.	5/9/51
UR-200 p. 3-5	Gardner, D.E. Smith, F.A. Hodge, H.C.	Fluoride concentration of placental tissue.	2/11/52
UR-200 p. 6-11	Smith, F.A. Gardner, D.E.	Effect of renal dysfunction on the urinary excretion of fluoride.	2/11/52
UR-200 p. 12-14	Smith, F.A. Gardner, D.E. Hodge, H.C.	Skeletal storage of fluoride in the human.	2/11/52
UR-200 p. 15-16	Smith, F.A. Gardner, D.E.	Miscellaneous tissue fluoride concentrations.	2/11/52

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- UR-200 Smith, F.A. Fluoride excretion in industrial workers. 2/11/52
p.17-18 Gardner, D.E.
- UR-200 Smith, F.A. Blood fluoride levels in dogs following 2/11/52
p.19-23 Gardner, D.E. inhalation of HF.
- UR-222 Smith, F.A. Blood fluoride concentrations in dogs 11/3/52
p.51 Gardner, D.E. exposed to hydrogen fluoride. (Abstract)
DeVoldre, J.
Hodge, H.C.
- Dale, P.P. Dental conditions in workers chronically
McCaughey, H.B. exposed to dilute and anhydrous hydrofluoric
acid. (J. Am. Dental Assoc. 37:131-140,
Aug.1948)
- Hodge, H.C. The concentration of fluorides in drinking
water to give the point of minimum caries
with maximum safety. (J. Am. Dental Assoc.
40:436-439, Ap.1950)
- Shourie, K.L. Preliminary studies of the caries inhibiting
Hein, J.W. potential and acute toxicity of sodium
Hodge, H.C. monofluorophosphate. (J. Dental Research
29:529-533, 1950)
- Smith, F.A. Investigations of the metabolism of fluoride.
Gardner, D.E. II. Fluoride content of blood and urine as
Hodge, H.C. a function of the fluorine in drinking
water. (J. Dental Research 29:596-600,
1950)
- Smith, F.A. Investigations on the metabolism of fluoride.
Gardner, D.E. I. The determination of fluoride in blood.
(J. Dental Research 30:182-188, 1951)
- Gardner, D.E. The fluoride content of placental tissue
Smith, F.A. as related to the fluoride content of
Hodge, H.C. drinking water. (Science 115:208-209,
Overton, D.E. 1952)
Feltman, R.

TOXICITY OF MISCELLANEOUS SUBSTANCES

M-1556	Voegtlin, C.	Acute toxicity of lead salts in experimental animals. (Single fatal doses by different routes of administration.)	10/9/44
M-1601	Weil, C.S. et al.	Toxicity of P-539, trifluoromonochloro-ethylene ₂ . A preliminary report.	12/44
M-2005 MDDC-1715	Spiegl, C.J. Howe, R.E. LaFrance, L.	The toxicity of hexachlorpropylene and trichloroacrylyl chloride.	7/47
UR-48 AECU-18	Sprague, G.F. Doran, E. Scott, J.K. Stokinger, H.E.	The inhalation toxicity of sodium acid sulfate mist at 75 mg/m ³ in animals.	11/12/48
UR-192	Gosselin, R.E. Maynard, E.A. Downs, W.L. Miller, G.J. Berke, H.L. Hodge, H.C.	The toxicity and urinary excretion of crystalline metaphosphates.	3/18/52
UR-200 p.24-26	Maynard, E.A. Downs, W.L.	Short-term feeding studies on sodium fluorophosphate (Na ₂ PO ₃ F) and potassium hexafluorophosphate (KPF ₆) in rats.	2/11/52
UR-204	Tidball, C.S. Gosselin, R.E. Downs, W.E. Mearian, R. Maynard, E.A. Rothstein, A.	The toxicology of a phosphate polymer and its use as a uranium antidote. (Thesis)	5/16/52
UR-213 p.69	Tidball, C.S. Gosselin, R.E. Rene, R.M.	Mechanisms responsible for acute toxicity of a phosphate glass. (<u>Federation Proc.</u> , 11:162, 1952)	7/31/52
UR-229	Wilson, H.B. Stokinger, H.E. Sylvester, G.E.	The acute inhalation toxicity of carnate ore dust; a thirty-day study.	12/17/52
MDDC-1070	Voegtlin, C.	Toxicity of certain heavy metal carbonyls (Ni(CO) ₄ , Mo(CO) ₆ , W(CO) ₆ , Cr(CO) ₆).	4/30/47
AECU-743	Maynard, E.A. DiStefano, V. Hurwitz, L. Neuman, W.F.	A recommended method for the measurement of the acute toxicity of a substance administered by intraperitoneal injection. Coramine (Nikethamide) as adjuvant to atropine in treatment of poisoning by EPN (ethyl p-nitrophenyl thionobenzenephosphonate). (<u>Proc. Soc. Exptl. Biol. Med.</u> 78:712-713, 1951)	1/17/50

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TOXICITY OF PLUTONIUM

M-1878	Boyd, G.A. Fink, R.M.	Comparative intravenous lethal dose pilot studies for polonium, radium, and plutonium in rats. (NRES Div.VI, vol.3)	6/1/46
M-1902	Boyd, G.A. Fink, R.M.	A comparative intravenous lethal dosage study of radium, plutonium, and polonium in rats with clinical, pathological and hematological observations. (NRES Div.VI, vol.3)	7/22/46

TOXICITY OF POLONIUM

M-1519	Silberstein, H.	Summary of studies on the physiological behavior of polonium. (NNES Div.VI, vol.3)	6/23/44
M-1529	Fink, R.M. Bale, W.F.	Preliminary report on the metabolism of polonium. (NNES Div.VI, vol.3)	8/2/44
M-1551	Fink, R.M.	Progress report on the metabolism of polonium. (NNES Div.VI, vol.3)	9/21/44
M-1579	Minto, W.L. Fink, R.M.	Progress report on metabolism of polonium. III. Tracer studies in two human subjects. (NNES Div.VI, vol.3)	11/11/44
M-1659	Minto, W.L. Fink, R.M.	Progress report on the metabolism of polonium. IV. Further intravenous and oral experiments with rats. (NNES Div.VI, vol.3)	4/16/45
M-1811	Kimball, C.P. Fink, R.M.	Inhalation of volatilized polonium by rats. (NNES Div.VI, vol.3)	12/20/45
M-1837	Silberstein, H.E. Valentine, W.N. Lawrence, J.S. Fink, R.M.	Metabolism of polonium. VI. Tracer studies in three human subjects following intravenous or oral administration. (NNES Div. VI, vol.3)	2/6/46
M-1878	Boyd, G.A. Fink, R.M.	Comparative intravenous lethal dose pilot studies for polonium, radium, and plutonium in rats. (NNES Div.VI, vol.3)	6/1/46
M-1902	Boyd, G.A. Fink, R.M.	A comparative intravenous lethal dosage study of radium, plutonium, and polonium in rats with clinical, pathological and hematological observations. (NNES Div.VI, vol.3)	7/22/46
M-2002 p.31-35	Hursh, J.B.	The effect of BAL and NDR 399 on excretion of polonium.	11/15/47
M-2012 p.15-18	Hursh, J.B.	Survival experiments on polonium injected rats as affected by BAL treatment.	1/15/48
UR-42	Casarett, G.W.	A serial study of pathological and hematological effects of intravenously injected polonium in rats.	11/4/48
UR-83	Hursh, J.B.	The therapeutic use of BAL in polonium toxicity. I. The effect of dithiol compounds on the excretion of polonium. II. Blood and tissue distribution of polonium as affected by BAL. III. Survival experiments on polonium injected rats as affected by BAL treatment. (J. Pharmacol. Exptl. Therap. 103:450-459, 1951; Proc. Soc. Exptl. Biol Med. 79:210-212, 1952)	7/12/49

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UR-145 AECD-3046	Garr, M. Hayden, E. Scott, J.K. Stannard, J.N.	The activation of latent bartonellosis in the rat following intravenous adminis- tration of polonium.	11/29/50
UR-201	Casarett, G.W.	Histopathology of alpha radiation from internally administered polonium. (Thesis)	8/25/52
UR-220	Gallimore, J.C., Jr.	A radiochemical and autoradiographic study of the distribution of polonium in rats after intravenous administration. (Thesis)	10/6/52
UR-224	Thomas, R.G. Altman, K. Stannard, J.N. Salomon, K.	Polonium induced anemia in rats as studied with alpha-C ¹⁴ -glycine.	12/8/52

TOXICITY OF RADIUM

M-1590	Bale, W.F. Dowdy, A.H.	Report of visit with Dr. Robley Evans at the Massachusetts Institute of Technology on November 15, 1944.	n.d.
M-1695 AECD-2122	Silberstein, H.E.	Radium poisoning. A survey of the literature dealing with toxicity and metabolism of absorbed radium. (NNES Div.VI, vol.3)	5/26/45
M-1739	Silberstein, H.E. Fink, R.M.	Metabolism of radium. I. Tracer studies on rats after intravenous administration. (NNES Div.VI, vol.3)	8/2/45
M-1878	Boyd, G.A. Fink, R.M.	Comparative intravenous lethal dose pilot studies for polonium, radium, and plutonium in rats. (NNES Div.VI, vol.3)	6/1/46
M-1902	Boyd, G.A. Fink, R.M.	A comparative intravenous lethal dosage study of radium, plutonium, and polonium in rats with clinical, pathological and hematological observations. (NNES Div.VI, vol.3)	7/22/46
M-2002 p.36-38	Hursh, J.B.	Measurement of radon in breath samples.	11/15/47
UR-119	Hursh, J.B. Gates, A.A.	The radium content of the body for individuals with no known occupational exposure. (Nucleonics 7, no.1:46-59, 1950)	5/18/50
UR-152 p.100-105	Hursh, J.B. Gates, A.A.	Radium analysis of source and tap water.	2/1/51
UR-164 p.34-37	Shandley, P.D.	The radium content of milk.	5/9/51
UR-189 p.6-7	Hursh, J.B. Gates, A.A.	Radium analysis of municipal water supplies.	10/29/51
UR-205 p.6-10	Hursh, J.B.	Excretion of radium by dogs after a single intravenous injection.	5/14/52
	Hursh, J.B. Gates, A.A.	Body content of radium in individuals with no known exposure. (Federation Proc. 8: 358, 1949)	

TOXICITY OF THORIUM

M-1949	Stern, E.	The biological action of thorium with emphasis on intravenous use of thorotrast (colloidal ThO ₂)	7/45
UR-13 AECD-2283	Ackerman, H. Allen, R.P. Bonner, G. Downs, W.L. Hodge, H.C. Maynard, E.A. Neuman, W.F. Scott, J.K. Sparks, A. Stokinger, H.E.	Preliminary studies of the toxicity of thorium.	2/26/48
UR-38 p.66-68	Hall, R.H.	Acute toxicity of inhaled thorium nitrate dust.	7/15/48
UR-45 p.72-74	Hall, R.H. Root, R.E.	Acute toxicity of inhaled thorium nitrate dust.	10/15/48
UR-103 p.55-59	Hall, R.H. Root, R.E. Stroud, C.	Inhalation toxicity of thorium fluoride.	1/31/50
UR-142 p.72-75	Hall, R.H.	Inhalation toxicity of thorium oxalate.	11/1/50
UR-190	Hall, R.H. Stroud, C.A. Scott, J.K. Root, R.E. Steadman, L.T. Stokinger, H.E.	Acute toxicity of inhaled thorium compounds.	11/13/51
	Scott, J.K. Neuman, W.F. Bonner, J.F.	The distribution and excretion of thorium sulphate. (<u>J. Pharmacol. Exptl. Therap.</u> 106:286-290, 1952)	

TOXICITY OF URANIUM

M-1513	Roberts, E.	Urinary alkaline phosphatase activity as a sensitive and early index of uranium poisoning.	5/1/44
M-1518	Hodge, H.C.	Summary of the toxicity results of one-month lung exposure studies to uranium compounds.	6/10/44
M-1523	Dale, P.P.	Proposed determinations of uranium in extracted teeth and alveolar bone of uranium employees as possible index of bodily storage.	6/29/44
M-1542	Dale, P.P.	The effects of UO_2F_2 on the oral tissues.	8/30/44
M-1543	Miller, J.	Acute toxicity of UO_2F_2 .	9/5/44
M-1554	Stokinger, H.E. Dygert, P. Sanford, R.A.C. Siegal, G.	Effect of low calcium diet on the deposition of uranium in the skeleton and soft tissue of rats exposed to uranium dusts.	9/15/44
M-1570	Hodge, H.C. Neuman, W.F. Steadman, L.T. Haven, F.L. Dounce, A.L. Stokinger, H.E. Roberts, E. Metcalf, R.G.	Report of papers presented at tri-monthly meeting held in Chicago on 30 September and 1 October 1944 by University of Rochester group. [Subject - uranium toxicity and methods of study.]	11/9/44
M-1602	Stokinger, H.E.	Final report: UO_2F_2 inhalation study. A 37-day study at a mean concentration of 12.2 mg/m^3 of the A. Toxic effects of inhalation by laboratory animals. B. Tests of efficiency of respiratory protective devices.	8/44
M-1631	Voegtlin, C. Hodge, H.C.	Recommendation for "maximum allowable concentration" of certain uranium compounds in factory air, with a summary of experimental evidence.	2/15/45
M-1632	Roberts, E. Spiegl, C.J.	The mechanism of bicarbonate action in uranium-poisoned rats.	6/44
M-1652	Spiegl, C.J. Roberts, E.	Vitamin C metabolism in uranium toxicity.	6/44
M-1653	Hodge, H.C.	First annual review of the studies of oral toxicity of various uranium compounds.	10/2/44

M-1654	Stokinger, H.E.	U ₃ O ₈ one-month study at a mean concentration of 17 mg/m ³ of the A. Toxic effects of inhalation by laboratory animals and B. Test of efficiency of respirators.	3/45
M-1674	Haven, F.L.	A histological study of the pancreas in acute uranium poisoning.	7/7/44
M-1677	Stokinger, H.E.	UO ₂ . A 30-day study at a mean concentration of 22.0 mg per cubic meter. A. Toxic effects of inhalation by laboratory animals. B. Tests of efficiency of respiratory protective devices.	2/45
M-1679	Maynard, E.A.	A 30-day experiment on the oral toxicity of UF ₄ in rats.	4/10/45
M-1690	Maynard, E.A.	A 30-day experiment on the oral toxicity of U ₃ O ₈ in rats.	4/24/45
M-1691	Neuman, W.F. Mulryan, R.J.	The effect of diet on acute uranium toxicity.	9/44
M-1696	O'Leary, J.C. O'Leary, J.F.	A study of the color in filtrates of uranium poisoned rat urines after precipitation with silver lactate-lactic acid reagent.	3/45
M-1698	Orcutt, J.A.	Studies of attempts to protect against the percutaneous absorption of UO ₂ (NO ₃) ₂ .	4/20/45
M-1710	Orcutt, J.A. Smith, N.B.	Survey of local and systemic damage caused by application of uranium compounds to the skin and to the eye.	3/21/45
M-1711	Maynard, E.A.	Two month experiment on oral toxicity of UO ₃ in rats.	6/13/45
M-1712	Roberts, E. Spiegel, C.J.	A 30-day study at mean concentration of 4.5 mg/m ³ of toxic effects of inhalation of uranium-nitrate dust in laboratory animals.	4/45
M-1713	Maynard, E.A.	One month experiment on the oral toxicity of UO ₂ in rats.	5/7/45
M-1714	Maynard, E.A.	One month experiment on the oral toxicity of UO ₂ acetate in rats.	5/8/45
M-1746	Berkowitz, H.L. Rothstein, A.	The effect of uranium poisoning on capillary permeability as measured by Evans Blue dye method.	8/9/45
M-1754	Maynard, E.A.	One month experiments on oral toxicity of UCl ₄ in rats.	6/26/45

M-1770	Neuman, W.F. Wills, J.H. Adler, D.L.	The localization of uranium in the rat kidney.	9/45
M-1786	Haven, F.L.	Tolerance of rats to uranium salts.	9/45
M-1795	Spiegl, C.J. Schepartz, A.I.	Toxicology of UF_6 , following its introduction into the atmosphere.	10/45
M-1797	Dygert, H.P. Oberger, H.	Toxic effects of inhalation of UF_4 by laboratory animals, and tests of efficiency of respiratory protective devices in atmospheres of UF_4 .	4/45
M-1812	Weil, C. Horton, C. Pozzani, U. Wilson, H.	"Hi-grade" ore. One-month study at a concentration of 1.4 mg/cu meter of the effects of inhalation by laboratory animals. Final report.	12/45
M-1813	Hodge, H.C.	Review of the first year's work of uranium dust inhalation in experimental animals. Toxicological data of the inhalation studies of the various uranium compounds at high dust concentrations.	7/45
M-1815	Cobler, J.G.	Uranium tetrachloride. A 30-day study of the toxic effects of inhalation of dust by laboratory animals at 18 mg/cu meter.	7/45
M-1824	Cobler, J.G.	Uranium tetrachloride. UCl_4 . A 37-day study: toxic effects of inhalation by laboratory animals at concentration of 3.3 mg/m ³ .	10/45
M-1833	Stokinger, H.E. Dygert, H.P.	Uranium peroxide. A 23-day study at a concentration of 19.5 mg per cubic meter.	7/45
M-1835	Rothstein, A. Dittman, D. Berkowitz, H. Same, E.	Uranium trioxide. A 28-day study of toxic effects in laboratory animals resulting from inhalation of UO_3 dust at a concentration of 20 mg/m ³ .	11/45
M-1836	Pozzani, U.C. Weil, C. Wilson, H. Horton, C.	"High-grade" ore. One month study at a mean concentration of 4.8 mg/m ³ of the effects of inhalation by laboratory animals.	12/45
M-1838	Hodge, H.C.	Summary of experimental evidence of the toxicity of UO_2 , U_3O_8 , UF_4 and "High-grade" ore.	10/45
M-1845	Maynard, E.A.	One month experiment on the oral toxicity of uranium nitrate in rats.	1/20/46
M-1846	Roberts, E. Bishop, C.W. Brodie, D.C. Wichser, F.W.	Uranium nitrate. $UO_2(NO_3)_2 \cdot 6H_2O$. A one month study at mean concentration of 20 mg/m ³ of effects of inhalation by laboratory animals.	10/45

M-1873	Maynard, E.A.	30-day experiment on the oral toxicity of "UF ₄ Salunak" in rats.	2/4/46
M-1876	Hodge, E.C. Maynard, E.A.	Feeding certain uranium compounds to rats. Review of second year's work.	4/46
M-1877 AECD-2428	Crossland, R.S. Haven, F.L. Edwards, V.M.	Studies of unsaturation of phospholipid fatty acids of the liver, kidney, and blood of uranium-poisoned rats.	1/46
M-1883	Maynard, E.A.	One month experiment on the oral toxicity of uranium nitrate in mature rats.	2/9/46
M-1885	Maynard, E.A.	One month experiment on the oral toxicity of UO ₂ in rats.	2/1/46
M-1892	Dygert, H.P.	Uranium tetrafluoride. UF ₄ . 30-day study of a concentration of 4.8 mg UF ₄ /m ³ .	7/46
M-1893	Dygert, H.P.	Uranium tetrafluoride. UF ₄ . 30-day study at a concentration of 0.5 mg UF ₄ /m ³ .	7/46
M-1899	Maynard, E.A.	One month experiments on the oral toxicity of uranium nitrate in rabbits.	7/15/46
M-1900	Wills, J.H. Main, E.R.	The effects of uranium on renal function.	7/31/46
M-1901	Roberts, E.	A 30-day study at a concentration of 0.5 mg/m ³ of the toxic effects of inhalation of uranium nitrate dust by laboratory animals.	8/46
M-1902	Rothermel, J.J.	A study of toxicological effects of inhalation of uranium tetrachloride dust at a concentration of 0.2 mg/m ³ .	4/45
M-1904	Dygert, H.P. Oberg, H.A.	A 34-day inhalation study at a mean concentration of 21 mg of uranium nitrate UO ₂ (NO ₃) ₂ ·6H ₂ O and tests of respiratory protective devices in atmospheres of UO ₂ (NO ₃) ₂ ·6H ₂ O.	9/46
M-1909	Dygert, H.P. Oberg, H.A. Sanford, R.	"High grade" uranium ore dust. A 30-day study at a concentration of 22 mg U/m ³ .	9/46
M-1913	Rothstein, A.	A 30-day study of toxicological effects resulting from inhalation of 20 mg/m ³ of Na ₂ U ₂ O ₇ by laboratory animals.	5/46
M-1926	Rothermel, J.J.	A study of toxicological effects of the inhalation of uranium tetrachloride dust at a concentration of 1.8 mg/m ³ .	6/46

M-1932	Neuman, W.F. Mulryan, B.J.	The effect of environmental temperature on acute uranium toxicity, and the changes in body temperature in response to uranium injections.	10/46
M-1933	Neuman, W.F. Mulryan, B.J.	The effect of water intake on the acute toxicity of uranium.	10/46
M-1939	Rothermel, J.J.	A study of toxicologic effects of inhalation of uranium tetrachloride dust at a concentration of 0.4 mg/m ³ .	2/45
M-1942	Dygert, H.P. Oberg, H.A.	(NH ₄) ₂ U ₂ O ₇ ·4H ₂ O. A 30-day study of ammonium diuranate at a concentration of 20 mg per cubic meter, and tests of efficiency of respiratory protective devices in atmospheres of (NH ₄) ₂ U ₂ O ₇ ·4H ₂ O.	10/46
M-1943	Neuman, W.F.	The distribution and excretion of absorbed uranium. Part I. Analytical procedures and methods.	10/46
M-1958	Rothstein, A.	Inhalation toxicity in laboratory animals exposed to 2.8 mg/m ³ of UO ₂ F ₂ dust for 30 days.	12/46
M-1977	Spiegl, C.J. Schlamowitz, M. Minor, J.	A 30-day study of toxic effects of inhalation of UF ₆ , following its introduction into the atmosphere at concentration of 0.3 mg/m ³ .	5/12/47
M-1978	Roberts, E.	Influence of single intravenous injection of graded dosage of soluble uranyl salts on urinary catalase and protein excretion, blood non-protein nitrogen, and renal histological changes in rabbits.	11/46
M-1980 AECD-2204	Allen, R. Neuman, W.F.	The treatment with 2,3-dimercaptopropanol (BAL) of acute systemic uranium intoxication in rats. (NRES Div.VI, vol.1, chap.25, sec.8) (<u>J. Pharmacol. Exptl. Therap.</u> 96:95-98, 1949)	5/26/47
M-1982	Spiegl, C.J. Schepartz, A.I.	Toxicology of atmospheres containing UF ₆ . A study of exposure of animals to UF ₆ at a mean concentration of 3.0 mg UF ₆ /m ³ (2.0 mg U/m ³).	11/46
M-1983	Rothstein, A.	Inhalation toxicity of 0.19 mg/m ³ of UO ₂ F ₂ .	4/10/45
M-1984 R AECD-2127	Thompson, H.E. Steadman, L.T.	Insufflation studies in rabbits with dusts of uranium compounds. 1943-1947. (NRES Div.VI, vol.1, chap.22)	6/11/48

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M-1992	Rothstein, A.	Inhalation toxicity of 9.3 mg/m ³ of UO ₂ .	4/47
M-1993	Allen, R.P. Battaglia, J.A.	The effects of uranium dioxide powder applied subcutaneously to rabbits.	9/47
M-1994	Rothstein, A.	Inhalation toxicity of 2.0 mg/m ³ of UO ₂ . A five-week study.	5/47
M-1995	Rothstein, A.	Inhalation toxicity in laboratory animals exposed to 0.65 mg UO ₂ F ₂ /m ³ for 34 days.	8/47
M-1999	Orcutt, J.A. Neuman, M.W.	The toxicology of uranyl nitrate following percutaneous absorption.	11/20/45
M-2006 MDDC-1731	Sprague, G.F.	Control exposure chamber studies. (NNES Div.VI, vol.1, chap.21A, sec.3.1)	1/9/48
M-2014 AECD-1915	Neuman, W.F. Neuman, M.W. Main, E.R. Mulryan, B.J.	The deposition of uranium in bone. I. Animal studies. (NNES Div.VI, vol.1 chap.24, sec.1) (<u>J. Biol. Chem.</u> 175: 705-709, 1948)	2/9/48
M-2015 AECD-1916	Neuman, W.F. Neuman, M.W.	The deposition of uranium in bone. II. Radioautographic studies. (NNES Div. VI, vol.1, chap.24, sec.2) (<u>J. Biol. Chem.</u> 175:711-714, 1948)	2/9/48
M-2016 AECD-1917	Neuman, W.F. Neuman, M.W. Main, E.R. Mulryan, B.J.	The deposition of uranium in bone. III. Effect of diet. (NNES Div.VI, vol.1, chap.24, sec.3) (<u>J. Biol. Chem.</u> 175:715-719, 1948; <u>Phys. Rev.</u> 74:1330-1337, 1948)	2/9/48
M-2017 AECD-2215	Neuman, W.F. Neuman, M.W. Main, E.R. Mulryan, B.J.	The deposition of uranium in bone. IV. <u>In vitro</u> adsorption studies. (NNES Div.VI, vol.1, chap.24, sec.4) (<u>J. Biol. Chem.</u> 179:325-333, 1949)	3/10/48
M-2018 AECD-2018	Neuman, W.F. Neuman, M.W. Main, E.R. Mulryan, B.J.	The deposition of uranium in bone. V. Ion exchange studies. (NNES Div.VI, vol.1, chap.24, sec.5) (<u>J. Biol. Chem.</u> 179:335-340, 1949)	3/23/48
M-2019 AECD-2019	Neuman, W.F. Neuman, M.W. Main, E.R. Mulryan, B.J.	The deposition of uranium in bone. VI. Ion competition studies. (NNES Div.VI, vol.1, chap.24, sec.6) (<u>J. Biol. Chem.</u> 179:341-348, 1949)	4/6/48
UR-1 AECD-1780	Ashenburg, N.J.	Uranium tetrachloride. Two one-year inhalation toxicity studies of animals at 0.2 and 0.05 mg U/m ³ . (NNES Div.VI, vol.1, chap.21A, sec.3.4)	1/30/48
UR-2 AECD-2008	Ashenburg, N.J.	Uranium dioxide studies. (NNES Div.VI, vol.1, chap.21A, sec.3.5)	1/30/48

UR-4 AECD-1918	Spiegl, C.J.	The toxicity of uranium hexafluoride fume in animals exposed for one year to 0.05 and 0.2 mg U/m ³ respectively. (NNES Div.VI, vol.1, chap.21A, sec.3.3)	2/5/48
UR-6 AECD-1963	Wilson, H.B.	The relation of particle size of UO ₂ dust to toxicity following inhalation by animals. (NNES Div.VI, vol.1, chap.21C) (<u>J. Ind. Hyg. Toxicol. 30:319-331, 1948</u>)	2/12/48
UR-7 AECD-1919	Rothstein, A.	Uranium tetrafluoride; two one-year inhalation toxicity studies of animals at 3.0 and 0.5 mg/m ³ respectively. (NNES Div.VI, vol.1, chap.21A, sec.3.6)	2/17/48
UR-8 AECD-1981	Rothstein, A. Larrabee, C.	The cell surface of yeast as the site of inhibition of glucose metabolism by uranium. (NNES Div.VI, vol.1, chap.25, sec.1) (<u>J. Cellular Comp. Physiol. 32:247-259, 1948</u>)	2/18/48
UR-10 AECD-1920	Bishop, C. Roberts, E.	Some aspects of carbohydrate metabolism in normal animals and in animals poisoned with uranyl nitrate, hydrogen fluoride, and alloxan. (NNES Div.VI, vol.1, chap.23, sec.2)	2/19/48
UR-17 AECD-1968	Rothstein, A. Frenkel, A. Larrabee, C.	Certain characteristics of the complex of uranium with cell surface groups of yeast; the relationship of these groups to glucose metabolism. (NNES Div.VI, vol.1, chap.25, sec.2) (<u>J. Cellular Comp. Physiol. 32:261-274, 1948</u>)	3/23/48
UR-23 AECD-2212	Gruschow, J. Mann, W.	Uranium tolerance and citrate excretion. (NNES Div.VI, vol.1, chap.23, sec.3)	4/15/48
UR-24 AECD-2028	LaBelle, C. Booth, C. Barrett, R.	The retention of uranium dioxide in rabbits. (NNES Div.VI, vol.1, chap.21B)	4/19/48
UR-30 AECD-2129	Yaeger, R.G.	Uranyl nitrate. Four one-year inhalation toxicity studies of animals at 0.04, 0.25, "0.4" and 2.0 mg/m ³ . (NNES Div.VI, vol.1, chap.21A; sec.3.2)	5/17/48
UR-34 AECD-2150	Berke, H. Rothstein, A.	The ratio of amino acid nitrogen to creatinine in the urine as a sensitive test for uranium poisoning. (NNES Div.VI, vol.1, chap.23, sec.1) (<u>J. Pharmacol. Exptl. Therap. 96:179-187, 1949; 96:198-208, 1949</u>)	5/25/48
UR-38 P.31-35	Laakin, S. Wilson, H.B.	The relation of particle size of uranium dioxide dust to toxicity following inhalation by animals.	7/15/48

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UR-38 p.35-43	Stokinger, H.E.	Deposition, accumulation, and elimination of uranium.	7/15/48
UR-38 p.43-44	Rothstein, A.	Mechanism of action of uranium on isolated cells.	7/15/48
UR-45 p.50-51	Wilson, H.B. Sylvester, G.E. Stokinger, H.E.	The relation of particle size of UO_2 to toxicity following inhalation by rabbits and rats.	10/15/48
UR-45 p.51-54	Wilson, H.B. Sylvester, G.E. Stokinger, H.E.	The effects of exposure of rabbits and rats to inhalation of hydrated UO_3 at approximately 3.6 mg/m^3 concentration and 0.3μ mass-median particle size.	10/15/48
UR-45 p.76	Smith, F.A.	Protective action of fluoride in uranium poisoning.	10/15/48
UR-50 AECD-2476	Neuman, W.F. Allen, R. Mulryan, B.J.	Preliminary observations of uranium metal on wound healing with reference to gas formation.	1/13/49
UR-51 AECD-2442	Sprague, G.F. Pettengill, A. Brown, B. Stokinger, H.E.	A second-year inhalation toxicity study of animals employing uranyl nitrate hexahydrate at 4 mg/m^3 . (NNES Div.VI, vol.1, chap.21A, sec.4)	12/19/48
UR-54 AECD-2477	Rothstein, A.	The metabolic effects of uranium on the yeast cell. (NNES Div.VI, vol.1, chap.25, sec.5)	1/11/49
UR-64 AECU-147	Sprague, G. Meier, R. Pettengill, A. Smith, F. Scott, J. Stokinger, H.	A two-week beryllium sulfate mist inhalation study in animals at a concentration of 100 mg/m^3 .	2/16/49
UR-67 AECD-2784	Hodge, H.C. Stokinger, H.E. Neuman, W.F. Bale, W.F. Brandt, A.E.	Suggested maximum allowable concentration of insoluble uranium compounds in air. (NNES Div.VI, vol.1, chap.26, sec.1)	4/7/49
UR-70 p.27-28	Maynard, E.A. Downs, W.L. Fuller, M.E.	Fat content of diet as a factor in the toxicity of uranyl nitrate hexahydrate when fed to male albino rats.	4/25/49
UR-75 AECD-2709	Allen, R.	The effects of uranium dioxide powder applied subcutaneously through an incision in the skin of rabbits.	5/23/49
UR-80 AECD-2783	Rothstein, A. Meier, R.C. Hurwitz, L. Berke, H.L. Larrabee, C.	The mechanism of action of uranium on cells. (NNES Div.VI, vol.1, chap.25, sec.4)	7/5/49

1129951

UR-81 AECD-2785	Hodge, H.C. Stokinger, H.E. Neuman, W.F.	Suggested maximum allowable concentrations of soluble uranium compounds in air. (NNES Div.VI, vol.1, chap.26, sec.2)	6/30/49
UR-82 AECD-2786	Neuman, W.F.	Urinary uranium as a measure of exposure hazard. (NNES Div.VI, vol.1, chap.26, sec.3) (<u>Ind. Med. Surg.</u> 19:185-191, 1950)	6/29/49
UR-87 p.17-18	Wilson, H.B.	The effects of exposure of rabbits and rats to inhalation of hydrated uranium trioxide dust at approximately 10 mg/m ³ concentration and 0.45 μ mass-median particle size.	7/30/49
UR-103 p.29-35	Wilson, H.B. Sylvester, G.E. LaBelle, C.W. Scott, J.K. Smith, F.A. Laskin, S. Lauterbach, K.E.	The relation of particle size of hydrated uranium trioxide dust to toxicity following inhalation by rabbits and rats.	1/31/50
UR-116 p.49-54	LaBelle, C.W.	The distribution and transport of uranium after deposition in the rabbit by inhalation.	4/27/50
UR-117	Hurwitz, L.	A kinetic study of normal and uranium inhibited hexose metabolism in yeast.	5/3/50
UR-127 p.41-45	Stokinger, H.E. Wilson, H.B. Sylvester, G.E. Dzuiba, S.P.	Lobar partition of inhaled U ₃ O ₈ particles.	8/1/50
UR-128 AECD-2905	Maynard, E.A. Hodge, H.C. Downs, W.L.	Demonstration of antidotal action of polyphosphate in metal poisoning. (<u>Am. J. Physiol.</u> 163:733-734, 1950)	8/3/50
UR-142 p.41-51	LaBelle, C.W. Stokinger, H.E. Dohl, J.M.	Organ weights and the calculation of transport of insoluble particles from the lung.	11/1/50
UR-142 p.52-55	Maynard, E.A. Downs, W.L. LaSher, M.F.	Antidotal action of polyphosphates in uranium poisoning.	11/1/50
UR-164 p.38-40	Wilson, H.B. Sylvester, G. Ashworth, B.	Effects of particle size and purity on the toxic response of UO ₂ by inhalation.	5/9/51
UR-166	LaFrance, L.J.	A partial bibliography on uranium and its compounds with especial reference to pharmacology and toxicology. (NNES Div.VI, vol.1, chap.27, sec.2)	5/11/51

- UR-197 Wilson, H.B. The relation of particle size of uranium 6/6/52
 Sylvester, G.E. dioxide dust to toxicity following inha-
 Laskin, S. lation by animals.II. (Arch. Ind. Hyg.
 LaBelle, C.W. Occupational Med. 6:93-104, 1952)
 Scott, J.K.
 Stokinger, H.E.
- UR-204 Tidball, C.S. The toxicology of a phosphate polymer and 5/16/52
 Gosselin, R.E. its use as a uranium antidote. (Thesis)
 Downs, W.L.
 Megirian, R.
 Maynard, E.A.
 Rothstein, A.
- UR-213 Megirian, R. The influence of polyphosphates on 7/31/52
 p. 12-20 Gosselin, R. uranium excretion.
 Meier, R.
 Duiba, S.
- UR-222 Hodge, H.C. The effect of uranium-produced nephrosis 11/3/52
 p. 55 Smith, F.A. in the rabbit on the urinary excretion
 Gardner, D.E. of sodium fluoride administered in the
 Downs, W.L. drinking water. (Abstract)
 Maynard, E.A.
- AECD-2143 Frankel, A.W. The effect of uranyl-chloride on the 10/30/47
 respiration and photosynthesis of *Chlorella*
pyrenoidosa.
- MDDC-1562 Rothstein, A. The mechanism of action of uranium on 11/20/47
 carbohydrate metabolism of yeast.
- AECD-2329 Dale, P.P. Oral conditions among ten enlisted men 11/30/47
 chronically exposed to UF₆ for six hours.
- Neuman, W.F. The distribution and excretion of injected
 Fleming, R.W. uranium. (J. Biol. Chem. 173:737-748,
 Dounce, A.L. 1948)
 Carlson, A.B.
 O'Leary, J.
 Mulryan, B.J.
- Haven, F.L. The urinary excretion of citrate in
 Randall, C. uranium-poisoned rats. (J. Biol. Chem.
 175:737-744, 1948)
- Maynard, E.A. Effects of feeding uranium nitrate hexa-
 Randall, C. hydrate in the diets of breeding white
 Hodge, H.C. rats. (J. Pharmacol. Exptl. Therap. 95:
 Scott, J.K. 421-428, 1949)
- Hodge, H.C. Pharmacologic tools in the study of the
 mechanism of uranium poisoning. (Arch.
Ind. Hyg. Occupational Med. 2:300-311, 1950)

1129953

TOXICITY OF ZIRCONIUM

UR-38 p.76	Maynard, E.A.	Acute toxicity of zirconium by injection.	7/15/48
UR-45 p.90	Maynard, E.A. Downs, W.L.	Intraperitoneal injection of zirconyl nitrate.	10/15/48
UR-152 p.109-116	Spiegel, C.J. Calkins, M.C.	ZrCl ₄ mist inhalation at 20 mg/m ³ ; deposition and retention in tissues.	2/1/51

MISCELLANEOUS SUBJECTS, REPORTS ON

M-1655	Dowdy, A.H.	Catalogue of reports issued by Rochester Area for period May 1, 1943 thru April 1, 1945.	n.d.
M-1692	Neuman, W.F. Carlson, A.B.	An investigation of methods for laundering materials contaminated with uranium.	2/45
M-1755		Report of Industrial Tolerance Conference, Washington, D.C., January 23-24, 1945.	n.d.
M-1941	Sprague, G.F., Jr.	A 30-day study of chamber-exposed control animals.	10/46
M-1952 MDDC-1764	Rekers, P.E.	Homotransplantation of the mammalian adult kidney.	12/18/46
M-1964	Sprague, G.F., Jr. Harrison, W.	A 36-day study of chamber exposed control animals.	8/46
M-1979	Sprague, G.F., Jr.	A three-month study of non-exposed control animals.	2/46
M-1990	Sprague, G.F., Jr. Harrison, W.	Report on animal controls for inhalation exposure studies. A 90-day study.	10/45
UR-28 AECD-2062	Novitski, E. Stern, C.	The viability of individuals heterozygous for recessive lethals. (<u>Science</u> 108:538-539, 1948)	4/29/48
UR-49	Howland, J.W.	Synopsis of analytical facilities at the University of Rochester Atomic Energy Project.	11/29/48
UR-96 p. 66-71	Gosselin, R.E.	Studies on the phagocytosis of inorganic particles by rabbit cells <u>in vitro</u> . Preliminary notes.	11/3/49
UR-108	Carlson, A.B. Neuman, W.F.	The removal of uranium compounds from cloth, a laundry problem.	5/8/50
UR-115 AECD-2874	Watts, N.P. McConnell, K.P.	Effect of polonium ²¹⁰ and selenium ⁷⁵ in experimental <u>Schistosoma mansoni</u> infection in mice. (<u>Am. J. Hyg.</u> 53:11-16, 1951)	4/27/50
UR-116 p. 14-22	Gabrio, B.W. Salomon, K.	The distribution of total ferritin in the intestine and mesenteric lymph nodes of horses after iron feeding. (<u>Proc. Soc. Exptl. Biol. Med.</u> 75:124-127, 1950)	4/27/50
UR-138	Duffy, B.J., Jr. Howland, J.W.	Radioidodine (I ¹³¹) principles of diagnosis and treatment of thyroid disease. (<u>N.Y. State J. Med.</u> 51:1399-1405, 1951)	10/25/50

- | | | | |
|--------------------|--|---|----------|
| UR-152
p. 54-58 | Furth, F.W.
Scott, J.K. | The therapeutic effect of aureomycin on
<u>Bartonella muris</u> infection in rats. | 2/1/51 |
| UR-152
p. 65-75 | Kingsley, H.D.
Hogg, L., Jr.
Payne, J.T.
Morton, J.H. | Studies in prolonged anesthesia in swine
and dogs. | 2/1/51 |
| UR-155 | Crump, S.L. | Present status of variance component
analysis. (<u>Biometrics</u> 7:1-16, 1951) | 1/25/51 |
| UR-156 | Mason, K.E.
Shaver, S.L.
Hodge, H.C.
Maynard, E.A. | Extensive intratubular and extratubular
edema of the rat testis compatible with
spermatogenic function. | 2/2/51 |
| UR-187 | Duffy, B.J., Jr.
Morgan, H.R. | ACTH and cortisone aggravation of the
febrile response of rabbits to bacterial
endotoxin. (<u>Proc. Soc. Exptl. Biol. Med.</u> | 10/11/51 |

- Cantarow, A.
Wirts, C.W.
Snape, W.J.
Miller, L.L. Effect of certain choleric agents on excretion of pigment and bromsulfalein in bile. (Am. J. Physiol. 154:506-512, 1948)
- Boyd, G.A.
Eberl, J.J. Absolute reaction kinetics of tobacco mosaic virus and a proposed theory of denaturation. (J. Phys. & Colloid Chem. 52:1146-1153, 1948)
- Lehmann, E.E.
Bishop, F.W. Introducing a better way to process surgical gloves. (Modern Hosp. 71, Oct. 1948)
- Salomon, K.
Gabrio, B.W. Plasma calcium fractions after electric convulsion treatment. (Arch. Neurol. Psychiat. 62:99-104, 1949)
- Carpenter, C.M.
Stokinger, H.E.
Suhrland, L.G.
Ackerman, H. Chemotherapy of murine leprosy. (Am. Rev. Tuberc. 60:359-365, 1949)
- Scott, J.K. Book review: Histopathology of irradiation from external and internal sources, by W. Bloom. (Arch Path. 48:490, 1949)
- AECU-742 Watts, N.P.
Boyd, G.A. Schistosoma mansoni miracidium under phase difference microscopy. 11/4/49
- Schilling, J.A.
Karr, J.W.
Hursh, J.B. The treatment of a lingual thyroid with radioactive iodine. (Surgery 27:130-138, 1950)
- Thale, T.
Gabrio, B.W.
Salomon, K. Hallucination and imagery induced by mescaline. (Am. J. Psychiat. 106:686-691, 1950)
- Cox, G.J.
Hodge, H.C. The toxicity of fluorides in relation to their use in dentistry. (J. Am. Dental Assoc. 40:440-451, 1950)
- Segal, H.L.
Miller, L.L.
Morton, J.J. Determination of gastric acidity without intubation by use of cation exchange indicator compounds. (Proc. Soc. Exptl. Biol. Med. 74:218-220, 1950)
- Segal, H.L.
Miller, L.L.
Morton, J.J.
Young, H.Y. The use of cation exchange indicator compounds to determine gastric acidity without intubation. (Gastroenterology 16:380-386, 1950)
- Crump, S.L.
Izzo, J. A clinical comparison of modified insulins. (J. Clin. Invest. 29:1514-1527; 1950)

- Watman, R.N.
Altman, K.I.
Salomon, K. Surgically induced splenogenic anemia in the rabbit. (Am. J. Physiol. 167:835, 1951)
- Wedd, A.M.
Blair, H.A. Action of coumangine on heart muscle. (Proc. Soc. Exptl. Biol. Med. 78:271-274, 1951)
- Wedd, A.M.
Blair, H.A. The action of procaine on the heart. (Anesthesiology 12:261-269, 1951)
- Wedd, A.M.
Blair, H.A.
Warner, R.S. The action of procaine amide on the heart. (Am. Heart J. 42:399-405, 1951)
- Trunnell, J.B.
Duffy, B.J., Jr.
Marshall, V.F.
Whitmore, W.F.
Woodard, H.Q. The use of progesterone in treatment of cancer of the prostate. (J. Clin. Endocrin. 11:663-676, 1951)
- Frazell, E.L.
Duffy, B.J., Jr. Hürthle cell cancer of the thyroid: a review of 40 cases. (Cancer 4:952-956, 1951)
- Altman, K.I.
Watman, R.N.
Salomon, K. Surgically induced splenogenic anemia in the rabbit. (Nature 168:827-828, 1951)
- Duffy, B.J., Jr.
Howland, J.W. Radiophosphorus (P^{32}) in diagnosis and treatment. (N. Y. State J. Med. 52:551-554, 1952)
- Wedd, A.M.
Blair, H.A. The action of acetyl-strophanthidin on heart muscle. (J. Pharmacol. Exptl. Therap. 104:334-339, 1952)
- Gosselin, R.E.
Rothstein, A.
Miller, G.J.
Berke, H.L. The hydrolysis and excretion of polymeric phosphate. (J. Pharmacol. Exptl. Therap. 106:180-192, 1952)

BOOKS

Conference on Metabolic Aspects of Convalescence, Josiah Macy, Jr. Foundation, N.Y. Transactions of the Fifteenth Meeting, 1947. p.71-79. Clinical methods and their limitations: practical problems and hazards in the application of labelled compounds to clinical investigations, by W.F. Bale.

Advances in biological and medical physics, volume 1. N.Y., Academic, 1948. p.387-408. The effects of irradiation from the atomic bomb on the Japanese, by J.W. Howland and S.L. Warren. (MDDC-1301)

A symposium on the use of isotopes in biology and medicine, Madison, Wisconsin, Univ. of Wisconsin Pr., 1948. p.395-408. Health hazards in the use of radioactive isotopes, by W.F. Bale.

Technique of organic chemistry, edited by A. Weissberger. Volume 1: Physical methods of organic chemistry. N.Y., Interscience, 1949. Chapter 30. Determination of radioactivity, by W.F. Bale and J.F. Bommer, Jr.

Annual review of physiology, 1950. Stanford, Calif., Annual Reviews, Inc., 1950. p.399-420. Conduction and synaptic transmission in the nervous system, by H.A. Blair.

Conference on Metabolic Interrelations, Josiah Macy, Jr. Foundation, N.Y. Transactions of the Second Conference, 1950. p.32-72. Bone as a problem in surface chemistry, by W.F. Neuman.

Pneumoconiosis (Sixth Saranac Symposium). N.Y., Hoeber, 1950. Part IV. The beryllium problem.

Chapter 15. Introduction. J.W. Howland

Chapter 17. Pathology of acute experimental beryllium poisoning: Changes resulting in venous blood from the intravenous administration of beryllium sulfate. J.K. Scott.

Chapter 18. Preliminary data on rat feeding with beryllium. E.A. Maynard, W.L. Downs and H.C. Hodge.

Chapter 19. Certain aspects of the acute toxicity of beryllium injected intraperitoneally. H.C. Hodge, W.L. Downs and E.A. Maynard.

Chapter 20. Preliminary studies in the toxicology of beryllium: The effect of intratracheal injection of beryllium in experimental animals. C.W. LaBelle and M.R. Cucci.

Chapter 21. Initial studies of the toxicity of inhaled beryllium sulfate dust and beryllium metal fume. G.F. Sprague, C.W. LaBelle, A.G. Pettengill and H.E. Stokinger.

Chapter 22. A review of analytical methods for beryllium. W.F. Neuman.

Chapter 23. An analysis of dust and fume hazards in a beryllium plant. S. Laskin, R.A.N. Turner and H.E. Stokinger.

Chapter 24. Summary of the beryllium problem in connection with atomic energy production. J.W. Howland.

A manual of artificial radioisotope therapy, edited by P.F. Hahn. N.Y., Academic, 1951. Chapter 6. Radioactive iodine in the diagnosis and treatment of hyperthyroidism, by J.B. Hursh and J.W. Karr.

A monograph of the Collembola or springtail insects of New York State, by E.A. Maynard. Ithaca, N.Y., Comstock Pub. Co., 1951.

NATIONAL NUCLEAR ENERGY SERIES DIVISION VI, VOLUME 1*PHARMACOLOGY AND TOXICOLOGY OF URANIUM COMPOUNDS

Carl Voegtlin and Harold C. Hodge, Eds.

Part I. The pharmacology and toxicology of uranium compounds.

- Chapter 1. The chemistry of uranium compounds. A.L. Dounce and J.F. Flagg. (MDDC-422)
- Chapter 2. Analytical methods for determining uranium and fluorine. J.F. Flagg. (MDDC-321)
- Chapter 3. Statistical methods. D.V. Tiedeman, L.S. Kegan, and M.J. Wantman. (MDDC-332)
- Chapter 4. Pathological anatomy following uranium poisoning. T.B. Barnett and R.G. Metcalf. (MDDC-249)
- Chapter 5. Characteristics of uranium poisoning. J.H. Wills. (MDDC-271)
- Chapter 6. Toxicity following parenteral administration of certain soluble uranium salts. F. Haven and H.C. Hodge. (MDDC-258)
- Chapter 7. ~~Studies of toxicity of various uranium compounds when fed to experimental animals. E.A. Maynard and H.C. Hodge. (MDDC-263)~~
- Chapter 8. The toxicology of compounds of uranium following applications to the skin. J.A. Orcutt. (MDDC-266)
- Chapter 9. The toxicology of uranium compounds following application to the eye. J.A. Orcutt. (MDDC-265)
- Chapter 10. Toxicity following inhalation. H.E. Stokinger, A. Rothstein, E. Roberts, C.J. Spiegl, H.P. Dygert, C.W. LaBelle, and G.F. Sprague, Jr. (MDDC-376)
- Chapter 11. The distribution and excretion of uranium. W.F. Neuman. (MDDC-264)
- Chapter 12. Tolerance to uranium compounds. F. Haven. (MDDC-257)
- Chapter 13. The action of uranium on enzymes and proteins. A.L. Dounce and T.H. Ian. (MDDC-423)
- Chapter 14. Catalasuria as a sensitive test for uranium poisoning. A.L. Dounce, E. Roberts, and J.E. Wills. (MDDC-252)
- Chapter 15. The mechanism of action of uranium compounds in the animal body. A.L. Dounce. (MDDC-253)

* Part I, II. N.Y., McGraw-Hill, 1949.
Part III, IV. N.Y., McGraw-Hill, in press.

Chapter 16. Studies on human exposure to uranium compounds. J.W. Howland.
(MDDC-260)

Part II. The pharmacology and toxicology of fluorine and hydrogen fluoride.

Chapter 17. Toxicity following inhalation of fluorine and hydrogen fluoride.
H.E. Stokinger. (MDDC-330)

Part III. Chronic studies.

Chapter 18. Chemistry. W.F. Neuman and G.H. Tishkoff.

Chapter 19. Biochemical methods. N. Glover, F.A. Smith, W. Mann, and
L.T. Steadman.

Chapter 20. Oral toxicity of uranium compounds. E.A. Maynard, W.L. Downs,
and H.C. Hodge.

Chapter 21. Toxicity following inhalation for one and two years.
H.E. Stokinger, R.C. Baxter, H.P. Dygert, C.W. LaBelle, S.
Laskin, U.C. Pozzani, E. Roberts, J.J. Rothermel, A. Rothstein,
C.J. Spiegl, G.F. Sprague III, H.B. Wilson, and R.G. Yaeger.

Chapter 22. Insufflation studies in rabbits with dusts of uranium compounds.
H.E. Thompson and L.T. Steadman. (M-1984R)

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Chapter 23. Metabolic studies. H.L. Berke, A. Rothstein, C.W. Bishop,
E. Roberts, and W. Mann.

Chapter 24. Deposition of uranium in bone. W.F. Neuman.

Chapter 25. Studies in cell metabolism. A. Rothstein.

Chapter 26. Maximum allowable concentration of uranium dust in air.
H.C. Hodge, H.E. Stokinger, W.F. Neuman, W.F. Bale, and A.E.
Brandt.

Chapter 27. Biological effects of uranium: literature review. A.G. Dinse
and L.J. LaFrance.

Chapter 28. Special materials. H.E. Stokinger and C.J. Spiegl.

Chapter 29. Résumé of chapters 18 to 28. H.C. Hodge.

NATIONAL NUCLEAR ENERGY SERIES DIVISION VI, VOLUME 2*

STUDIES OF THE BIOLOGICAL EFFECTS OF RADIATION

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- Chapter 1. Observations on animals exposed to single doses of whole body x-radiation. R.D. Boche and F.W. Bishop. (MDDC-250)
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- Chapter 3. The effects of acute exposure to roentgen radiation on the peripheral blood of experimental animals. M. Ingram and W.B. Mason. (UR-122)
- Chapter 4. Experiments on radiated animals in relation to shock. K. Fink. (MDDC-212)
- Chapter 5. Cross circulation experiments. J.S. Lawrence, W.N. Valentine, and A.H. Dowdy. (MDDC-217, MDDC-326)
- Chapter 6. Fingerprint changes in monkeys following x-radiation. R.A. Harvey. (MDDC-215)
- Chapter 7. Relation of mutation frequency to dosage in Drosophila. W.P. Spencer and C. Stern. (MDDC-765)
- Chapter 8. Comparison of x-radiation and beta radiation effects in rabbits. F.W. Bishop. (MDDC-203)
- Section B. Chronic x-radiation.
- Chapter 9. Observations on animals exposed to whole body x-radiation in divided doses over long periods. Introduction and techniques. A.H. Dowdy, R.D. Boche, and F.W. Bishop. (MDDC-254)
- Chapter 10. Clinical observations, effects on growth and survival. R.D. Boche. (MDDC-204)
- Chapter 11. The effects of chronic exposure to roentgen radiation on the peripheral blood of experimental animals. M. Ingram and W.B. Mason. (UR-121)
- Chapter 12. Pathology in animals subjected to repeated daily exposure to roentgen rays. R.G. Metcalf, F.A. Inda, T.B. Barnett and G.W. Casarett. (UR-88)

* N.Y., McGraw-Hill, in press.

- Chapter 13. Alterations in the ~~clinical blood chemistry~~ associated with chronic exposure of ~~dogs~~ to x-radiation. K. Fink. (MDDC-211)
- Chapter 14. Analysis of fingerprint changes in persons exposed to radiation. R.A. Harvey. (MDDC-216)
- Chapter 15. The influence of chronic irradiation with gamma rays at low dosages on the mutation rate in Drosophila melanogaster. E. Caspari and C. Stern. (M-1966 (MDDC-1200))
- Section C. Observations on animals exposed to fractionated doses of fast neutrons.
- Chapter 16. Fast neutron irradiation procedure. E. McDonald.
- Chapter 17. Clinical, pathological, and hematological effects of chronic neutron irradiation. J.O. Ely, M.H. Ross, R.G. Metcalf, F.A. Inda, T.B. Barnett, and G.W. Casarett. (UR-92)

NATIONAL NUCLEAR ENERGY SERIES DIVISION VI, VOLUME 3*BIOLOGICAL STUDIES WITH POLONIUM, RADIUM AND PLUTONIUM

Robert M. Fink, ed.

Part I. Distribution and excretion of polonium. (AECD-2591)

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- Chapter 2. Polonium distribution and excretion experiments with animals. H.E. Silberstein, W.L. Minto, R.M. Fink, G.A. Boyd, R.G. Metcalf, W. Mann, C.P. Kimball, and A.T. Gorham.
- Chapter 3. Studies of polonium metabolism in human subjects. H.E. Silberstein, W.N. Valentine, W.L. Minto, J.S. Lawrence, R.M. Fink, and A.T. Gorham.

Part II. Distribution and excretion of radium. (AECD-2592)

- Chapter 4. Historical background. H.E. Silberstein.
- Chapter 5. General methods used in radium distribution and excretion experiments. H.E. Silberstein.
- Chapter 6. Radium distribution and excretion studies with rats. H.E. Silberstein.

Part III. Toxicity of polonium, plutonium, and radium in rats.

- Chapter 7. Pilot studies on the intravenous lethal dosage of polonium, plutonium, and radium in rats. G.A. Boyd, H.E. Silberstein, R.M. Fink, A. Frenkel, W.L. Minto, R.G. Metcalf, G. Casarett, and G.M. Suter. (AECD-2593)
- Chapter 8. Simultaneous studies on the intravenous lethal dosage of polonium, plutonium, and radium in rats. G.A. Boyd, A. Williams, W.L. Minto, D.V. Tiedeman, R.M. Fink, G. Casarett, and R.G. Metcalf. (AECD-2605)

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THESES SUBMITTED BY GRADUATE STUDENTS

Box, C.J.	The effect of uranium nitrate on the cholesterol metabolism of the normal rat.	1945
Bishop, C.	Some aspects of carbohydrate metabolism in normal animals and in animals poisoned with uranyl nitrate, uranium tetrachloride, hydrogen fluoride, and alloxan.	1946
Carlson, A.B.	The removal of uranium compounds from cloth; a laundry problem.	1946
O'Leary, J.F.	The urinary excretion of phenol in uranium-poisoned rats.	1946
Orcutt, J.A.	The toxicology of various compounds of uranium following application to the skin and to the eye.	1946
Randall, C.	Citric acid of bones and urine of uranium-poisoned rats.	1946
Bonner, J.F., Jr.	Alpha and beta ray counters. (MDDG-967)	1947
Berke, H.L.	The ratio of urinary amino acid nitrogen to creatinine as sensitive test for uranium poisoning in the rabbit. (<u>Science</u> 108:524-531, 1948) (AEC-2276)	1948
Glover, N.	The isolation of microquantities of uranium by precipitation with protein prior to fluorometric determination.	1948
Danley, R.A.	Physico-chemical studies of the beryllium-citrate complex. (Part I, UR-59; Part III, UR-105)	1950
Gabrio, B.W.	Studies on ferritin. (AECU-831)	1950
Hurwitz, L.	A kinetic study of normal and uranium inhibited hexose metabolism in yeast.	1950
LaBelle, C.W.	The relation of particle size to toxicity.	1950
Richmond, J.E.	Studies concerning the effects of radiation on the biosynthesis of hemoglobin.	1950
Underwood, E.E.	Calcium exchange as the mechanism for the uptake of radioactive calcium by bone.	1950
Barr, I.A.	Dietary protein, methionine, and forced feeding in the irradiated rat. (Work performed at the National Institutes of Health, Bethesda, Maryland)	1951
Cool, W.S.	The effect of X-rays on polycythemic rats. (Work performed at National Institutes of Health, Bethesda, Maryland)	1951

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- Della Ross, R.J. Some aspects of the biosynthesis of chlorophyll. 1951
- Kanwisher, J.W. A chemical dosimeter for ionizing radiations. 1951
(UR-167)
- Kosel, G.E. Studies on the chemistry of beryllium. (UR-106) 1951
- Megirian, D. The deposition of fluoride in glycol-ashed bone. 1951
(UR-168)
- Morrow, P.E. A new pneumotachograph and its application to a 1951
study of human and canine respiration. (UR-182)
- Simon, G.A. A spectrographic analysis of a fission product 1951
(columbium).
- Tishkoff, G.H. Physico-chemical mechanisms of uranium transport 1951
in the body.
- Underwood, A.L. Contributions to the analytical chemistry of 1951
beryllium. Studies on the renal excretion of
beryllium. (Part I, UR-74,109; Part II, UR-171)
- Vyverberg, R.G. A quenching circuit for Geiger-Mueller counting 1951
of carbon 14 as carbon dioxide. (UR-160)
- Angleton, G.M. A spectrographic determination of cerium in 1952
biological material.
- Casarett, G.W. Histopathology of alpha radiation from internally 1952
administered polonium. (UR-201)
- Frankel, D.R. The relation of protein synthesis to nucleic acid 1952
phosphorus turnover in the rat liver. (UR-216)
- Gallimore, J.C., Jr. An autoradiographic and radiochemical study of the 1952
distribution of polonium in rats after intravenous
administration. (UR-220) (Work performed at the
University of Rochester and the Medical Division of
the Oak Ridge Institute of Nuclear Studies)
- Hammond, W.E. A spectrochemical method for the determination of 1952
naturally occurring trace amounts of beryllium in
biological and other material. (UR-202)
- Rosenzweig, W. A dosimetric study of high intensity gamma ray 1952
sources. (Work performed at Brookhaven National
Laboratory)
- Sanders, A.P. A radiation monitor for measuring A^{41} beta radiation 1952
dosage at Brookhaven National Laboratory. (Work
performed at Brookhaven National Laboratory)
- Spraragen, S.C. The effect of roentgen irradiation on intestinal 1952
absorption.

- Tidball, C.S. The toxicology of a phosphate polymer and its use 1952
as a uranium antidote. (UR-204)
- Toporek, M. L-histidine-2-C¹⁴, its synthesis and some aspects 1952
of its metabolism in rats. (UR-203)
- Watson, M.L. Spermatogenesis in the adult albino rat as revealed 1952
by tissue sections in the electron microscope.
(UR-185) (Biochim. et Biophys. Acta 8:369-374, 1952)
- Shaver, S.L. X-irradiation injury and repair in the germinal 1952
epithelium of male rats: I. Injury and repair in
adult rats. (UR-218) II. Injury and repair in
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