# OSU Theses and Dissertations 1960-1965

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# OSU

# Theses and Dissertations 1960-1965

Compiled by PATRICIA BRANDT

A Departmental and Author Index of 1,388 Masters Theses and Doctoral Dissertations Accepted by the Graduate School, Oregon State University

> Bibliographic Series Number 8 1967

#### **PREFACE**

OREGON STATE UNIVERSITY'S growth as a center of research and graduate study is nowhere more graphically illustrated than in its list of theses. Titles of theses 1932-1942 were published in 1946 by the Oregon State System of Higher Education along with graduate theses of all system schools. By 1960 Oregon State's list had become so large that it was published separately as *Theses and Dissertations*, 1943-1959 (Bibliographic Series No. 6). The present list covers 1960-1965, a period of only six years. All theses in this compilation have been prepared under the direction of Dr. Henry P. Hansen, Graduate Dean.

As in the preceding list, the arrangement is alphabetical by subject and chronological within each subject, with separate sections for Masters and Doctors. An author index is provided, as well as cross references for various subject areas.

Masters theses are available for interlibrary loan. Since 1957, Oregon State University has been affiliated with University Microfilms of Ann Arbor, Michigan, and doctoral dissertations from that date on are available only from University Microfilms. All theses and dissertations, of course, may be consulted in the William Jasper Kerr Library at Oregon State University.

RODNEY K. WALDRON Director of Libraries

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# Theses and Dissertations 1960-1965

RODNEY K. WALDRON Director of Libraries

#### AERONAUTICAL ENGINEERING

SEE Mechanical Engineering

#### AGRICULTURAL ECONOMICS

#### 1960 - Masters

- Borisutdhi, Montree. Agricultural Credit Facilities in Thailand.
   Hogg, Howard Carl. Merger of Selected Oregon Farm Cooperatives.
- 3. Moe, Lyle Eugene. Impact of Home Bulk Milk Dispensers on Consumption, Cost of Processing, and Distribution of Fluid Milk on Retail Routes.

#### 1961 - Masters

- 4. Ko, Wen Chen. An Econometric Analysis of Crop Response Functions as Related to Soil Test Measurements.
- 5. McDowell, James Irving. Livestock-Feed Grain Relationships Affecting Economic Adjustment in Oregon Agriculture.
- 6. Singh, Ajmer. The Distribution of Income Among Wheat Farmers as Affected by Selected Government Programs.
- 7. Tavaranusorn, Padh. Economic Survey of Klong Kriang Krai Fishing Village in Central Thailand.

#### 1962 - Masters

- 8. Carman, Hoy Fred. Consumer Preferences, Attitudes, Buying Practices, and Consumption Patterns for Broilers in Oregon.
- 9. Fife, Charles Lynn. Estimating Economically Optimum Nitrogen Rates by Incorporating Nitrogen Soil Tests and Moisture Factors Into Statistical Wheat-Fertilizer Response Functions on Condon Soils.
- 10. Pursell, John H. An Analysis of Costs and Efficiencies of Certain Methods Used in Vining Green Peas.
- Seetisarn, Manu. Agricultural Credit Policies and Procedures of Com-mercial Banks with a View to Improved Financing of Agriculture in Thailand.
- 12. Sterling, Robert Howard. Adjustment Problems of Non-Irrigated General Farms in the Willamette Valley.

- 13. Adulavidhaya, Kamphol. Analysis of Factors Affecting the Income of Farmers Growing Corn, Nakonrajasima, Thailand.
- 14. Ellis, Bruce Byron. Determination of Optimum Raw Product Sampling Procedures with Special Reference to Green Beans for Processing.

 Indrapalita, Aroon. An Economic Analysis of the Kang Krachan Multi-Purpose Water Development Project, Petchburi, Thailand.

16. Jenkins, Keith Bunker. A Multi-Stage Stochastic Decision Model for

Determining Optimal Replacement of Dairy Cows.

17. Maina, Francis Mugoiyo. An Analysis of the Growth and Development of the 'Tangent Grange Oil Company' as a Case Study.

 Simpson, Robert Sanford. An Econometric Analysis of Demand and Supply Relationships in the Douglas Fir Plywood Industry.

#### 1964 - Masters

19. Balankura, Saowaros. Demand Analysis of Rice in Thailand.

20. Bontrager, Harold Lee. An Analysis of Costs and Efficiencies in Cherry Brining as Affected by Container Type.

 Byran, Dallas Dean. Production Costs of Fryers and Effectiveness of In-Store Promotional Techniques on Increasing Fryer Sales.

 Drew, John Leo. Economic Analysis and Adjustment Opportunities of Grade A Dairy Enterprises in Benton County, Oregon.

 Gray, Edward Laurence. Capital for Growth and Adjustment of Agricultural Co-operatives.

24. Green, Warren James. A Cost Analysis of the Operation of Various Sizes and Types of Tractors on Selected Farms in Marion County,

25. Gronsdahl, John Kenneth. An Evaluative Study of Mail-In Electronic Farm Accounting Systems with Factors to Consider in Developing a Program in Saskatchewan, Canada.

26. Norman, David Wallace. An Economic Analysis of Beef Cattle Prices.

 Reeder, Clinton Bruce. Marginal Productivity of Credit for Programmed Farm Adjustments and Factors Limiting the Use of Credit in the Columbia Basin, Oregon.

28. Tongpan, Sopin. Economic Analysis of Jute.

#### 1965 - Masters

 Clevenger, Thomas Scott. An Analysis of Costs and Efficiencies in Mechanical Caneberry Harvesting.

30. Ezenekwe, Stephen Anofuechi. Possible Impacts of Farm Settlements on the Economic Development of Eastern Nigeria.

31. Jacobson, Carl Scott. The Potential Economic Effect of Noise-Induced Hearing Loss in the Oregon Forest Products Industry.

32. Mount, Timothy Douglas. An Analysis of the Present and Future Market for Lamb with Particular Reference to Oregon.

33. Oehrtman, Robert Lee. Physical and Economic Determinants That Limit Adjustments on Cattle Ranches in Northeastern Oregon.

34. Tosunthorn, Suphan. Factors Affecting Farm Income on the Sansai Land Settlement Project, Chiengmai, Thailand.

 Wissman, Roger Allen. The Role of Borrowed Funds in Oregon Cooperatives.

#### 1961 - Doctors

36. Davis, Lynn Herman. Production and Marketing of Broilers by Contract with Applications to Other Oregon Agricultural Enterprises.

 James, Sydney Carter. Techniques for Characterizing Oregon Soils for Agricultural Purposes in Terms of Physical and Economic Productivities.

- 38. Kimball, Norman Delmar. The Impact of Economic and Institutional Forces on Farmer Adjustments in the North Unit Deschutes Project.
- 39. Panyadhibya, Bhochana. Irrigation Development in the Central Plain of Thailand and the Country's Stages of Economic Growth.

- Gorman, William David. Potential Expansion of Fresh Market Sales as an Outlet for Oregon-Grown Vegetables.
- 41. Hubbard, Deon W. An Analysis of the Organization, Structure, and Use of the Corporate Form of Ownership for Farms and Ranches in Oregon.
- 42. Hutchings, Harvey Myron. An Economic Analysis of the Competitive Position of the Northwest Frozen Pea Industry.
- 43. Rock, James Anthony. A Theory of Economic Development at Warm Springs Indian Reservation, Oregon.
- 44. Schermerhorn, Richard Willis. Impact of Changing Market Organization and Structure of the Pacific Northwest Canned Fruit and Vegetable Industry.
- 45. Schneider, Vernon Earl. Factors to Consider in Determining Pricing Policies of Cooperative Bargaining Associations.
- 46. Welch, Robert Godfrey. An Analysis of the Financial Structure and Insurance Practices for Selected Types and Sizes of Oregon Farm Firms.

#### 1963 - Doctors

- 47. Gilchrist, Varge. Projecting Capital Accumulation for the Agricultural Firm-Household.
- 48. Greene, Charles Henry. Costs and Efficiency in the Operation of Oregon Seed Processing Warehouses.
- Owens, Thomas Richard. An Evaluation of Some Structure, Conduct and Performance Characteristics of the Portland-Vancouver Fluid Milk Market.

#### 1964 - Doctors

 Norton, Virgil Joseph. An Analysis of the Competitive Position of Oregon Hog Producers.

#### 1965 - Doctors

- Miller, Stanley Frank. An Investigation of Alternative Methods of Valuing Irrigation Water.
- Nielsen, Darwin Blaine. Economics of Federal Range Use and Improvement.
- Ricks, Donald Jay. An Appraisal of Future Economic Conditions Affecting the Pacific Coast Bartlett Pear Industry.
- 54. Singh, Ajmer. An Economic Evaluation of the Salmon-Steelhead Sport Fishery in Oregon.

#### AGRICULTURAL EDUCATION

- Ringo, Albion Leroy. A Proposed Schedule of Courses for the Gervais Union High School Adult Education Program.
- Ward, Darrell Lin. A Program of School Land Use for the Woodburn Vocational Agriculture Department.

57. Miller, Melvin Dee. Principles of Organizing Adult Classes in Agriculture in Oregon.

#### 1962 - Masters

- 58. Farring, Robert Maurice. Teaching Schedules of Vocational Agricultural Teachers in Multiple-Teacher Departments.
- 59. Noel, Wright Ralph. Placement of Vocational Agriculture Students.60. Scott, Forest Grant. An Educational Program to Use in the Selection of Sheep.
- 61. Williams, Thomas Artell. The Opinions of School Administrators Concerning the Year Around Employment of Vocational Agriculture Teachers in Oregon.

#### 1963 - Masters

- 62. Biney, Thomas Bart. Supervised Farming Programs for Public Schools in Ghana.
- 63. DeZoysa, Ranulu Percy Milton. A Program of Vocational Agriculture for Schools in Ceylon.
- 64. Dunham, Daniel Bentley. Subject Matter Principles Basic to Organizing and Teaching Fundamentals of Plant Science.
- 65. Fowler, Frederick Allen. A Suggested Farm Forestry Curriculum for Vocational Agriculture.
- 66. Shirley, Delbert Wallace, III. Safety Principles for Farm Tractor Operation.
- 67. Tellefson, Kemble Hershner. Vocational Agriculture Program Revision at Hermiston, Oregon.

#### 1964 - Masters

- 68. Halter, George Alen A Program of Studies for Amity Union High School.
- 69. Kunzman, Leonard. Teacher Preparation of Special Instructors of Adult Vocational Agriculture Classes.
- 70. Loewen, Curtis Eugene. The Agricultural Education Program in Roseburg Junior and Senior High Schools.
- 71. Skeans, Charles Norman. A Post High School Agricultural Education Program for Jefferson County.

#### 1965 - Masters

- 72. Burgess, Norman Dale. Organization of a Land Laboratory Program for Clackamas High School.
- 73. Johnson, John Richard. Agricultural Occupations in Clatsop County.
- 74. Krueger, August William, Jr. The Principle Approach in Teaching Mechanical Technology in Agriculture.
- 75. Yoshimoto, Stanley Hidetoshi. Land Laboratories in the Public Secondary Schools of Hawaii.

#### AGRICULTURAL ENGINEERING

#### 1960 - Masters

76. Schoof, James Earl. An Automatic, Null-Type Piezometer for Measuring Positive and Negative Soil Moisture Pressures in Soils with Low Permeability.

 Berney, James Edward. Optimum Sprinkler Application Rates on Soils of Low Infiltration Rate.

Yoder, Elmon Eugene. Composite Beam Action Between Roofing Material and Framework When Using Solid Bridging of Purlins in Pole-Type Construction.

#### 1963 - Masters

 Vongsuri, Sommai. Soil Water Ponding and Its Relationship to Sprinkler Application Rates, Initial Moisture Contents, and Uniformity of Storage.

#### 1964 - Masters

 Hamlin, George Frank. Comparison of Selected Methods of Measuring Hydraulic Conductivity and Diffusivity of Soil with Varied Clay Content.

#### 1965 - Masters

- Dehlinger, Charles Robert. Relationships Between Degree of Ponding and Uniformity of Soil Moisture Distribution Under Irrigation Sprinklers.
- 82. Laksanakorn, Wichai. Relation of the Drying Rate of Grain in a Continuous Counterflow Column to the Exposed Drying Rate.

#### ANALYTICAL CHEMISTRY

#### 1961 - Masters

83. Kirshen, Norman Alan. A Spectrophotometric Study of Arsenazo and Its Calcium Complex.

#### 1962 - Masters

84. Dennison, James Eugene. The Investigation of Octaammine-μ-nitro-μ-amidodicobalt (III) Nitrate as an Analytical Reagent for Sulfate.

85. Kuhn, Lloyd David. Chromatography of the Alkaline Earths on Chelating Ion Exchange Resins.

#### 1963 - Masters

 Brower, Harold Edward. Null-Point Determination of Fluoride with the Bismuth-Bismuth Fluoride Electrode.

87. Trammell, David Ross. The Differential Combustion of Carbon in Cast Iron.

#### 1960 - Doctors

88. Daniel, Jack Leland. A Detailed Study of the Carrier Concentration Method of Analysis of Uranium Oxide.

89. Varga, Louis Paul. The Nature and Stabilities of the Fluocomplexes of Tantalum.

#### 1962 - Doctors

90. Johnson, Arnold Richard. Differential Spectrophotometric Determination of Hafnium in the Presence of Zirconium.

91. Schnieder, Carl Rudolph. Determination of Low Level Hydrocyanic Acid in Solution Using Gas-Liquid Chromatography.

 Caton, Roy Dudley, Jr. Controlled Potential Coulometric and Polarographic Investigations of Metallic Ions in Fused Salts.

#### 1965 - Doctors

93. Healy, Michael Lyon. Coulometric Determination of Dissolved Oxygen.

 Mitchell, Lloyd James. Spectrophotometry of Molybdenum, Tungsten and Chromium Chelates of Quercetin.

 Shakashiro, Mouaffac Hamdy. The Determination of Titanium, Zirconium and Hafnium in Molybdenum, Niobium and Tantalum Alloys by Ion Exchange.

#### ANIMAL BREEDING

SEE Animal Science

#### ANIMAL HUSBANDRY

SEE Animal Science

#### ANIMAL NUTRITION

SEE Animal Science

#### ANIMAL SCIENCE

#### 1960 - Masters

 Bullis, Daniel Dean. Utilization of Natural and Synthetic Carotene and Synthetic Vitamin A with and Without Alpha-Tocopherol by Cattle.

97. Chermporn, Prasert. The Effect of Collection Time from Dairy Bulls
Upon Semen Quality.

98. Das, Jogananda. Effects of Five Different Levels of Milk Fat on the Life-Span of Bovine Spermatozoa Stored in Milk Diluents.

98a. Kliewer, Ray Henry. Gas-Pressure Technique for the Preservation of Bovine Spermatozoa.

#### 1961 - Masters

 Ampy, Franklin Roosevelt. The Relationship Between Serum Proteins and Growth in Beef Calves.

100. England, Noah Clinton. The Effect of Levels of Inbreeding of Dam and Offspring Upon Performance of Purebred Suffolk Lambs.

101. Schlender, John Ralph. Effect of Rations of Various Energy to Body Weight Ratios on Growth Rate and Feed Efficiency of Weaner Steers Fed to Slaughter.

102. Voravarn, Chavanit Nadakorn. Nutritive Value of Rice By-Products in Dairy Calf Meal.

#### 1962 - Masters

103. Al-Hachim, Ghazi Mohammed. Oxygen Uptake by Bovine Spermatozoa Subjected to Carbon Dioxide and Argon Gas Pressures.

104. Bennett, William Riley. Comparative Milk Yields, Milk Composition and Herd Health of Dairy Cows on Irrigated Pasture and in Dry-Lot. 105. Noteboom, William Duane. Some Effects of Plant Estrogens on Animals.

106. Petersen, Ray Olaf. The Use of High Roughage Pellets in Cattle and Sheep Feeding.

#### 1963 - Masters

- 107. Chapin, Roy Elliott. Effects of Pelleting and of Supplementation of Barley Rations for Swine with Tallow, Enzymes and Zinc.
- 108. Geel, Stanley Ernest. Brain Acetylcholinesterase Activity at Intervals
  After Head Irradiation in the Rabbit.
- 109. McNeill, David Gingles. Optimum Combination of Time and Rumen Fluid in Three In Vitro Techniques Used to Predict Forage Digestibility.
- 110. Miller, Alvin Earl. Effect of Varying Levels of Certain Enzymes on Digestibility of Roughage in the Rumen.

#### 1964 - Masters

- 111. Idris, Omer Fadle. The Effect of the Copper Intake on the Flavor and Storage Life of Meat Products.
- 112. Riker, Joseph Thaddeus, III. Response of Scorbutic Guinea Pigs to Ascorbic Acid and Adrenocorticotropic Hormone (ACTH).
- 113. Rose, Harvey Frederic. Weights and Nursing Positions of Pigs and Milk Production of Individual Udder Sections.
- 114. Smith, Gary Eugene. Nutritional Effects of Big Sagebrush (Artemesia tridentata) Nutt. on Deer.
- 115. Wilson, Jerry James. Improvement of Barley Utilization Through Feed Processing or Supplementation.

#### 1965 - Masters

 Alpan, Suleyman Orhan. Determination of Intake and Digestibility of Pasture Forages Using Conventional and Indicator Techniques.

#### 1960 - Doctors

- Bhannasiri, Tim. Haematological Study of Genetically Different Lines of Growing Beef Cattle.
- 118. Cramer, David Alan. Effects of Selenite Upon the Chemical Nature of Tissue Abnormalities in White Muscle Disease of Lambs.
- 119. Magill, Benjamin Fulton. The Utilization of Baled, Pelleted, and Wafered Alfalfa Hay by Dairy Cattle.
- 120. Stout, Floyd Madison. Aberrant Iron Metabolism and the Cotton Fur Abnormality Syndrome in Mink.

#### 1961 - Doctors

- 121. Bowden, David Merle. Correlations Between Certain Criteria of Ruminant Digestion In Vivo and In Vitro.
- 122. Larsen, Leland Murray. Effects of Barley Hulls on Energy Utilization by Swine.

#### 1962 - Doctors

- 123. Ratarasarn, Sucheep. Heart Rate Patterns in Beef Cattle.
- 124. Wheeler, Robert Roderick. Evaluation of Various Indicator Techniques in Estimating Forage Intake and Digestibility by Range Cattle.

 Snyder, Fred Roland. Evaluation of Nutritional Qualities of Common Ryegrass Screenings.

 Wagelie, Edwin Gan. Certain Physiological and Pharmacological Effects of Radiation on Rabbits.

#### 1964 - Doctors

127. Hunt, William Lynn. Ova Transfers in Sheep and Rabbits: Studies on Maternal Influences and Irradiation Damage.

#### 1965 - Doctors

128. Gill, Donald Ralph. Effect of Barley Pretreatment on Feeding Behavior, Rate and Efficiency of Gains for Swine.

 Loawhakasetr, Pathom. Influence of Certain Chemicals on the Sensitivity of Rat Embryos to X-Irradiation.

 Parer, Julian Thomas. Cardiovascular Changes During Pregnancy in the Ewe.

#### AUTOMOTIVE ENGINEERING

SEE Mechanical Engineering

#### BACTERIOLOGY

SEE Microbiology and Hygiene

#### BACTERIOLOGY AND HYGIENE

SEE Microbiology and Hygiene

#### BIOCHEMISTRY

#### 1960 - Masters

 Bourke, John Butts. The Effect of Various Herbicides on Glucose Metabolism in Garden Peas.

132. Shamberger, Raymond Joseph, Jr. Amino Acid Requirements of Aceto-bacter suboxydans Kluyver.

133. Bjerre, Solveig Hjordis Sorensen. A Comparative Study of the Carbohydrate Catabolism in Pseudomonadaceae Microorganisms.

134. Stevens, Vernon Lewis. The Effect of Herbicides on the Metabolism of Radioactive Acetate in *Pisum satirum* L. Roots.

#### 1961 - Masters

135. Kief, Mabel Marguerite. The Fate of 4 (2,4-Dichloro Phenoxy) Butyric Acid in Fat Metabolizing Systems.

- Chung, Chuen-Shang. Organic and Inorganic Nutrition of Tilletia contraversa.
- Sakoramonkol, Vichien. The Stability of Vitamin A in Hemolyzed Bovine Blood.
- 138. Winkle, Lyman William. Carbohydrate Catabolism in Pea Seeds (Pisum sativum) and the Effects of Gibberellic Acid.

- 139. Allison, Robert David. The Biosynthesis of Terpenes in *Pelargonium* graveolens.
- 140. Burbott, Alice Joyce. Interconversions of Monoterpenes in Peppermint.
- 141. Petersen, Thomas Gordon. The Purification and Characterization of a Soluble Mitochondrial Adenosinetriphosphatase from Cabbage, *Brassica oleracea*.
- 142. Smith, Karin Ann. The Relation of a Soluble Factor to Phosphorylation
  During the Oxidation of Reduced Nicotinamide Adenine Dinucleotides.
- 143. Still, Gerald G. The Occurrence of the Entner-Doudoroff Pathway in Azotobacter vinelandii.

#### 1964 - Masters

- 144. Arnold, Margaret Anna. The Relationship of 5'-Nucleotidase Activity in Lamb Muscle Tissue to Sub-Minimal Selenium Levels Administered to Their Dams.
- 145. Bilen, Oya Fatma. The Utilization of Some Amino Acids by Azoto-bacter vinelandii.
- 146. Wong, David Taiwai. Epoxidation of Cyclodiene Compounds by Rat Liver Microsomes.

#### 1965 - Masters

- 147. Attebery, Jerry Monson. Studies on the Interaction of 2,4-Dichlorophenoxyacetic Acid with *Bacillus subtilus* Alpha-Amylase.
- 148. Cheng, Jung Ta. The Effect of Potassium Pentachlorophenate on Selected Enzymes in Fish.
- 149. Jacobsen, Donald Weldon. The Biosynthetic Precursor of Ethylene in *Penicillium digitatum* Saccardo.
- 150. Milne, David Bayard. Studies on Copper Metabolism in the Cotton Rat Sigmondon hispidus texianus.
- 151. Roffler, Sheila Ann. Nutritional Muscular Dystrophy Production and Pectoral Muscle 5'-Nucleotidase Activity in the Chick.

#### 1960 - Doctors

- 152. Battaile, Julian. Biosynthesis of Terpenes in Mint.
- 153. Lotlikar, Prabhakar Dattaram. Effects of Herbicides on Oxidative Phosphorylation in Mitrochondria from Cabbage Brassica oleracea.

#### 1961 - Doctors

- 154. Lee, Chuan-Pu. Biochemical Studies of Western Ring Spot Virus.
- 155. McDonald, John Kennely. Carbohydrate Metabolism and Electron Transport Systems in the Ergot Fungus, Claviceps purpurea.
- 156. Malley, Arthur. Isolation and Some Properties of Allergens from Timothy Pollen.
- 157. Vaisey, Edgar Byron. Studies on the Organic Acid Metabolism of a Wheat Smut Fungus, Tilletia contraversa.

#### 1962 - Doctors

- 158. Anderson, John Arthur. In Vitro Metabolism of Claviceps purpurea (Ergot).
- 159. Bieber, Allan Leroy. Phospholipid Patterns in the Developing Chick Embryo.

160. Bieber, Loran Lamoine. Characterization of Naturally Occurring Beta-Methylcholine Phosphatide and Related Studies.

#### 1964 - Doctors

 Bourke, John Butts. Studies on the Metabolism of n-Propyl N, N-Di-n-Propyl Thiolcarbamate in Legumes.

162. Coffey, Ronald Gibson. Pathways of Glucose Utilization and Ribose Synthesis in the Chick Embryo.

163. Kolattukudy, Pappachan Ettoop. Effects of Washing and Aging on the Metabolism of Red Beet Root Slices.

164. Maragoudakis, Michael Emmanuel. Biosynthesis of Aminodicardoxylic Acids in Acetobacter suboxydans.

165. Ramsey, John Charles. Radiotracer Studies of Carbohydrate Catabolism in Tomato Fruit.

166. Wilson, David Franklin. The Effect of Alkaline pH on the Succinate Oxidase System of Sub-Mitochondrial Particles from Beef Heart Muscle.

#### 1965 - Doctors

167. Allen, Robert Roy. Protein Synthesis in Sarcophaga bullata.

168. Baker, Wilber Winston. Studies of Soluble and Particulate Isocitrate-Nicotinamide-Adenine Dinucleotide Phosphate-Oxidoreductase Activities During Development of the Chick Embryo.

169. Siek, Theodore John. Origin and Composition of Phospholipids in Chick Embryo and Chick Embryo Brain During Development.

170. Still, Gerald G. The Role of Some of the Krebs Cycle Reactions in the Biosynthetic Functions of *Thiobacillus thioparus*.

#### BIOENGINEERING

#### 1964 - Masters

171. Chambers, Alan B. A Cardiovascular Prosthesis for Subhuman Primates.

#### BOTANY

SEE Nematology, Phycology, Plant Anatomy, Plant Ecology, Plant Pathology, Plant Physiology, Systematic Botany (Taxonomy)

## CELLULOSE CHEMISTRY

SEE Forest Products Chemistry

#### CHEMICAL ENGINEERING

#### 1960 - Masters

172. Cengel, John Anthony. Viscosity of Liquid-Liquid Dispersions in Laminar and Turbulent Flow.

173. Cohn, Paul Daniel. Heat Transfer Coefficients for Condensation of Liquid Metal Vapors Inside a Vertical Tube.

174. Dunham, James Tallus. Stress-Corrosion Cracking Susceptibility of Zirconium in Ferric-Chloride Solution.

175. Macan, John Warren. Computer Evaluation of Binary Vapor-Liquid
Equilibrium Data.

176. Wright, Charles Harry. Pressure Drop and Heat Transfer for Liquid-Liquid Dispersions in Turbulent Flow in a Circular Tube.

#### 1961 - Masters

- Dickenson, Ronald Lee. Vapor-Liquid Equilibria Using an Improved Othmer Still.
- Nelson, Robert John. Phase Equilibria of Solid Metal Salts and Their Vapors.
- 179. Romig, Robert Pence. Investigation of the Performance Characteristics of a Mixer-Settler Extractor.
- 180. Williams, Peter Stanton. Heat Transfer and Pressure Profiles in the Vicinity of Annular Orifices.

#### 1962 - Masters

- Bergstad, Ralph Hundley. A Comparison of Three Probes Used for Measuring Local Heat Transfer Coefficients.
- 182. Fields, Stanley Rollin. Transient Temperatures and Inelastic Thermal Stresses in Gas-Cooled Perforated Ceramic Cylinders with Internal Heat Generation.
- 183. Pan, Robert Binloun. Natural Convection Heat Transfer from Finned Tubes.
- 184. Schaer, Michael Jon. Electrokinetic Power Generation.
- 185. Welch, John Allen. The Effects of Frequency and Amplitude in a Pulsed Extraction Column Employing the System Carbon Tetrachloride-Acetic Acid-Water.

#### 1963 - Masters

- 186. Bennett, Marlin John. A Study on Electrowinning Copper and Zinc from Low Grade Ores.
- 187. Frutiger, Richard Patrick. Testing of Vapor-Liquid Equilibrium Data for Thermodynamic Consistency.
- 188. McClary, Terry George. Effect of Tubular Reactor Geometry on the Saponification of Ethyl Acetate When Operating at Fixed Residence Times.

- 189. Block, Frank Elmer. Preparation of Yttrium and Rare-Earth Metals by Metallothermic Reduction.
- 190. Denenholz, Ira Marshall. The Effect of Neighboring Spheres on Mass Transfer from a Single Sphere.
- 191. Gurian, Marshall Irvin. Rotating Silver-Silver Chloride Electrode Studies in Gaseous Chlorine Environments.
- 192. Knudsen, Robert Allen. Chemical Reaction Studies by Frequency Response Methods.
- Larson, Edward Marshall. Diffusion Coefficients of Chlorinated Hydrocarbons in Air.
- 194. Noë, Alphonse Roman. Local and Average Heat Transfer Coefficients in a Fluidized Bed Heat Exchanger.

- 195. Davis, Bernard Eric. Efficiency of Thorium Extraction by Primary Amines as a Function of Pulse Frequency and Amplitude in a Pulsed Sieve-Plate Column.
- 196. Legan, Robert William. Friction Loss and Heat Transfer Characteristics for Turbulent Flow of Liquid-Liquid Dispersions.
- Nolan, Lawrence Lyle. Incipient Boiling and Burnout Heat Flux for Subcooled Water Flowing in Annuli Containing Heated Concentric Wires.
- 198. Sutton, Richard Frederich, Jr. The Electrical Conductance of Aqueous Solutions in Kaolin Membranes.

#### 1960 - Doctors

199. Fisher, Fred Dean. Construction and Operation of a High Temperature Solar Furnace: Studies of Elemental Boron.

#### 1962 - Doctors

- 200. Faruqui, Azimuddin Ahmad. Velocity and Temperature Profiles for Turbulent Flow of Liquid-Liquid Dispersions in Pipes.
- Narayanan, Krishnaswami. Local and Over-all Heat Transfer Coefficients in Baffled Heat Exchangers.
- 202. Stevenson, Franklin Dee. Vapor Pressures of Hafnium (IV) Iodide, Tungsten (VI) Chloride and Arsenic (III) Oxide by a Metal Diaphragm Technique.
- 203. Welty, James Richard. Design, Construction, and Calibration of a High-Temperature Calorimeter; High-Temperature Thermodynamic Properties of Selected Inorganic Compounds.

#### 1964 - Doctors

- Hauser, Victor Emerald, Jr. A Study of Carbon Anode Polarization in Fused Carbonate Fuel Cells.
- 205. Meyer, Walter. Equilibria in the Ion Exchange Systems  $H^{*1}$ – $Cs^{*1}$ ,  $H^{*2}$ – $Sr^{*2}$ ,  $H^{*1}$ – $Ce^{*3}$ ,  $Cs^{*1}$ – $Sr^{*2}$ ,  $Sr^{*2}$ – $Ce^{*3}$ ,  $H^{*1}$ – $Cs^{*1}$ – $Sr^{*2}$ ,  $H^{*1}$ – $Cs^{*1}$ – $Ce^{*3}$  and  $H^{*1}$ – $Sr^{*2}$ – $Ce^{*3}$
- 206. Ward, John Philip. Turbulent Flow of Liquid-Liquid Dispersions: Drop Size, Friction Losses, and Velocity Distributions.

#### 1965 - Doctors

- Clark, Dwight Pocock. Thermally Activated Electrochemical Cells Using a Stabilized Zirconia Electrolyte.
- 208. Divine, James Robert. Mass Transfer at Vertical Plane Electrodes as Affected by Electrode Separation, Porous Separation and Acceleration.
- 209. Kim, Duk Hwang. Momentum Transfer in Climbing-Film Flow in an Annular Duct.
- Landsberg, Arne. Solid-Vapor Equilibria of Hafnium and Zirconium Tetrachlorides.
- 211. Schaer, Michael Jon. A Liquid Sulfur Dioxide Battery.

#### **CHEMISTRY**

SEE ALSO Analytical Chemistry, Biochemistry, Forest Products Chemistry, Inorganic Chemistry, Organic Chemistry, Physical Chemistry

#### 1964 - Masters

 Teague, Jack Loren. Radiochlorine Exchange Reactions with Sulfuryl Chloride.

#### 1965 - Masters

213. Zahrt, John David. Thermodynamics of the Reaction Between F and M Centers.

#### 1960 - Doctors

214. DeHalas, Don Richard. Kinetics of the Decomposition of Organic Reactor Coolants.

#### 1965 - Doctors

215. Kuboyama, Morio. Mammalian Heart Cytochrome Oxidase.

#### CHILD DEVELOPMENT

SEE Family Life and Home Administration

#### CIVIL ENGINEERING

#### 1960 - Masters

- Beecroft, Gordon William. Creep and Shrinkage of Lightweight Concrete in Prestressed Applications.
- 217. Kim, Jai Bin. Investigation of a Hipped Plate Roof Structure.
- 218. Laursen, Harold Ivan. An Investigation of Retaining Wall Loadings.
- Mausshardt, Donald Bruce. Mechanics of Gas Transfer in Oxidation Lagoons.

- 220. Borgen, Arlen Lee. Cement Stabilization of Oregon Coastal Dune Sands.
- Carswell, John Keith. Persulfate Oxidizable Carbon as an Engineering Measure of Organic Pollutants in Water.
- 222. Hyden, John William. A Schwartz-Christoffel Analysis of Cavitating Flow in a Two-Dimensional Mitered Elbow.
- 223. Kim, Hong Shik. An Investigation of Prestressing Steel Beams.
- 224. Martin, Glen Leroy. A General Solution for Active and Passive Pressures on a Vertical Plane in a Sloping Earth Mass of Infinite Length.
- 225. Poole, Lester Earl. Design of Gabled and Multi-Story Frames by Plastic Moment Distribution.
- 226. Pritchett, Harold Duane. A Two-Dimensional Manifold Study.
- 227. Sabaroff, Bernard Joseph. An Investigation of Stress Distributions in a Timber Hyperbolic-Paraboloid Shell.
- Smith, Jack Douglas. Application of Ultrasonics to Particle Sedimentation in Water.
- 229. Worth, Joseph Earls. Establishment of Velocity Profiles in a Liquid Downstream from a Sudden Pipe Contraction.

230. Fandrem, Richard Lee. A Procedure for the Distribution of Internal Forces and Moments in Cylindrical Shells Under Uniform External Loading.

231. Liu, Cheng Lung. Experimental Study of Energy Distribution in a

Two-Dimensional Sudden Contraction.

232. Ryan, William Lee. Characteristics of Jet Diffusers for Ocean Outfalls.

233. Sawyer, Harold Louis. The Effect of Waste Water Lagoon Effluent Upon a Receiving Stream.

234. Schroeder, Edward Dean. The Degradation of Kraft Mill Waste in a Marine Environment.

235. Tejasen, Jumsak. Estimation of the Rate of Sedimentation in Reservoir.

236. Yu, John Bosco Chulsoo. Investigation of a Two-Bay Folded Plate Structure.

#### 1963 - Masters

237. Aijala, Timo Kalervo. Deflections of Simply Supported Plywood Plate Under Uniform Loading by Finite-Difference Equations.

238. Bolton, Frederick Merret. The Removal of Beet Waste Color by Acti-

vated Sludge.

239. Coene, Ronald Francis. Relationship Between Residual Chlorine and Coliform Density in Water Distribution Systems.

240. Feigner, Kenneth Darrel. An Evaluation of Temperature Reduction on Low Flow Augmentation Requirements for Dissolved Oxygen Control.

241. Godsil, Patrick James. The Effect of Elevated Pressure on the Activated

Sludge Process.

242. Henshaw, Thomas Lamond. The Fate of Specific Organisms in a Receiving Stream.

243. Johnson, Ronald Ernest. Pressure Distribution Around a Circular Cylinder Resting on a Flat Boundary in an Oscillating Fluid.

244. Kari, Earl Nyhus. An Evaluation of the Oxygen Resources in the Lower Willamette River During a Critical Low Flow Period,

245. Lenahan, Earl Leonard. The Effects of Gravity on the Oblique Hydraulic Jump.

246. Matthias, Judson Stillman. Investigation of the Effects of Skewed Contraction Joints on Concrete Roadway Slabs.

247. Ozols, Vitauts. The Influence of the Level of Illumination on the Effectiveness of Highway Signs.

248. Putnicki, George John. Design Criteria for Waste Water Lagoons in Oregon.

249. Seaders, John. Kinetics of Biological Contact Beds.

250. Serpanos, James Evan. Stiffness Matrix Analysis of Structures by Electronic Digital Computer.

251. Worley, John Larry. A System Analysis Method for Water Quality Management by Flow Augmentation.

#### 1964 - Masters

252. Buford, Gary Manford. Jet Diffusion as Related to Ocean Outfall

253. Cato, Stuart Leslie. Web Buckling Failure of Built-Up Girders with Rectangular Holes.

- 254. Evans, David Roland. Aircraft Washrack Wastes, Their Characteristics and Treatment.
- 255. Fisher, Richard Joseph. Girishk Power Development Project.
- 256. Harris, Dennis Roy. Diffusion in a Variable Density Liquid Under Conditions of Turbulent, Steady Flow.

- 257. Ching, Delwin Pow Kong. Elastically Supported Beam Columns.
- 258. Coddington, Charles William. High-Shear and Pressure-Activated Sludge Treatment—Solid-Liquid Separation.
- 259. Grant, Joseph. Matrix Analysis of Structures with Semirigid Connections.
- 260. Roach, Michael Dan. Contact Time and Reaction Rates for Trickling Filters.
- Streebin, Leale E. The Effect of Elevated Pressure and High Shear on Oxygen Uptake Rates in Activated Sludge.

#### CLOTHING AND TEXTILES

#### 1960 - Masters

- 262. Carlson, Elaine Kathryn. Practices in the Selection of Fabrics by College-Trained Homemakers as Compared with Those Having No College Training in Home Economics.
- 263. Thackeray, Renée. Factors Affecting Changes in Color of Men's Dress in France from the 16th Through the 19th Centuries.
- 264. Tobin, Agnes Louise. A History and Analysis of the Oregon Linen Industry.
- Vincent, Fern Aeileen. The Resistance of Wool and Polyacrylic Blankets to Abrasion.

#### 1961 - Masters

- 266. Hunter, Margaret. Relation of Costume to Cultural Change of a Selected Group of Indians of Middle America.
- Muller, Johanna Magdelena. The Origin and Techniques of Tapestry Weaving and Its Use in Contemporary Design.
- Savundranayagam, Mercia Indreni. Cultural Influences on the Dress of Modern Ceylon.

#### 1962 - Masters

- 269. Christensen, Barbara. Changes in Breaking Strength of Wool and Acrylic Blankets Resulting from Laundering.
- 270. Hammers, Margery Anne. A Brief History of Wallpaper and How It Has Been Influenced by Contemporary Ways of Life.
- 271. Lokken, Doris Elinor. Influences Affecting the Clothing of High School and College Men.
- 272. McEachran, Ailsa Evelyn. A Study of the Consumers' Knowledge of Yardage Fabric Information.
- 273. Orme, Kathryn. Clothing Practices and Problems of Foreign Women at Oregon State University.

#### 1963 - Masters

274. Fessler, Barbara Ruth. Factors Influencing Trousseau Selection of College Women.

275. Frescura, Lynda Glee. Clothing for Girls with Specified Physical Handicaps.

276. Hale, Myrna Beth. Analysis of the 1960 and 1961 Oregon State Uni-

versity Clothing Construction Placement Test.

277. Lamprecht, Helen. Textile Arts of the Mormon Pioneers from 1847-1900. 278. Lewis, Virginia Stolpe. The Influence of Present Day Mode of Living

on the Design of Contemporary Home Furnishing Fabrics. 279. Miller, Pearl Matilda. The Influence of Scandinavian Designers on Con-

temporary American Furniture.

280. Simons, Barbara Willetta. Comparative Evaluation of Effects of Dry Abrasion Upon Fabrics in the Accelerator.

#### 1964 - Masters

281. Borror, Merna Jane. The Relation of Selected Physical and Personality Characteristics to Color Preferences for Clothing.

282. Burnett, Marialyce. Some Socio-Economic Factors Associated with Clothing Purchasing Habits of a Selected Group of Women 60 Years of Age and Over.

283. Jacobsz, Maretha Stephanie. An Identification of and a Comparison Between Trends in Clothing and Textiles in a Selected Group of Colleges and Universities.

#### 1965 - Masters

284. Andersen, Beverly Joan. Cultural Change as Reflected in the Dress and Accessories of the Indian Tribes on the Pacific Northwest Coast.

285. Fortune, Susan Houston. Selected "Rovana" (Saran), "Verel" (Modacrylic), and Rayon Blend Drapery Fabrics Evaluated by Laboratory Tests for Resistance to Light, Laundering, Abrasion, Stress and Fire.

286. Hodam, Barbara Lenore. The Effect of Selected Commercial Detergents Used at Various Temperatures on Wool: Soil Removal as Evaluated by

Radioactive Tracer Methods and Dimensional Changes.

287. Johnson, Elaine Kay. Clothing Related to Aspirations for Status Among Lower Middle Class Working Women.

288. Merrell, Mabel. Comparative Performance of Polypropylene and Nylon

Hosiery Using Wear and Laboratory Tests.

289. Rohde, Rosalyn Opal. Thermal Insulation Values of Wool and Acrylic Blankets Before and After Laundering.

#### CLOTHING, TEXTILES AND RELATED ARTS SEE Clothing and Textiles

## COMMUNICATIONS ENGINEERING

SEE Electrical Engineering

#### CONTROL ENGINEERING SEE Electrical Engineering

#### DAIRY AND ANIMAL HUSBANDRY SEE Animal Science

#### DAIRY HUSBANDRY

SEE Animal Science

#### DAIRY MANUFACTURING

SEE Food Science and Technology

#### DAIRY PRODUCTION

SEE Animal Science

#### DAIRY TECHNOLOGY

SEE Food Science and Technology

#### **EDUCATION**

SEE ALSO Agricultural Education, General Science, Guidance and Personnel, Health Education, Home Economics Education

#### 1960 - Doctors

- 290. Baum, Milton Robert. Criteria for a School Budget.
- Cummins, Ernie Lee. Science Education in Public High Schools of Oregon.
- 292. Grassell, Edward Milton. An Evaluation of Educational Films in the Teaching of High School Physics in Oregon.
- 293. Pence, Don Pollard. Criteria for a System of Area Education Districts for the State of Oregon.
- 294. Sirnio, George John. Evaluation of the Follow-Up Services for Health Referrals in School Health Services in Selected Oregon Counties.

#### 1961 - Doctors

 Porter, Bernard Robert. Extracurricular and Nonteaching Duties of Industrial Arts Teachers in Wisconsin.

#### 1963 - Doctors

- Hampton, Earl. The Role of the Principal in the Modern Junior High School Guidance Program.
- 297. Lambson, Bob. An Evaluation of Academic Placement Practices for Seventh Grade Students in a Santa Monica, California, Junior High School.
- 298. McKinney, Max Russell. An Assessment of the Effectiveness of Small Group Counseling on Selected Eighth Grade Junior High School Students Having Moderate Emotional Problems.
- 299. Perkins, Edward A. The Effectiveness of Controlled Reading-Rate Practice Techniques in the Development of Speed and Accuracy in Second-Quarter College Typewriting.
- 300. Quale, Fred E. The Role of Pupil Personnel Practices in Articulation in the Junior High Schools of Oregon.
- 301. Verge, Arthur Charles. Changes in the Scholastic Background and Academic Ability of Summer School Students in the Santa Monica, California, Junior High Schools from 1956 to 1962.

302. Backlund, Darien Howard. Electronic Data Processing with Specific Reference to the Preparation, Duties, and Qualifications of the Programmer in the City of Portland, Oregon.

303. Howe, Robert Wilson. The Relationship of Learning Outcomes to Selected Teacher Factors and Teaching Methods in Tenth Grade Biology Classes in Oregon.

304. Plimpton, Hollis Winslow, Jr. The Development and Evaluation of Audio-Visual Techniques to Acquaint High School Students with Opportunities Available in the Private Colleges in Oregon.

305. Savundranayagam, Mercia Violet Sybil Cloelia Indreni. Development of

Home Economics Education Among the Tamils of Ceylon.

#### 1965 - Doctors

 Ferguson, Earl Eugene. A Guide to School District Reorganization for Umatilla County, Oregon.

307. Gainor, Leo Charles. A Comparison of the Teaching Performance with the Academic Record of Oregon State University Graduates in Elementary Education.

308. Koll, William Henry. Speed of Various Neuro-Muscular Responses in College Freshmen and Sophomores Ages Eighteen to Twenty-Two.

309. Loomis, William George. A Study of the Formal Preparation of Academic Teachers in Community Colleges with Proposals for Oregon.

310. Wallace, Eunice Ewer. A Comparison of Two Self-Instructional Methods for Improving Spelling in High School and College: A Twenty-Six Classroom Experiment.

311. Williams, Delos Dale. Oregon School District Reorganization 1957-64

and Implications for Improvement.

312. Winters, Arthur Wayne. The Identification of Early Delinquent Tendencies in Preadolescent Children in Umatilla and Union Counties of Oregon.

313. Yoder, Marlen Dean. The Development of Guidelines for Student Per-

sonnel Services in the Two-Year Community College.

#### ELECTRICAL ENGINEERING

SEE ALSO Electronics

#### 1960 - Masters

314. Amort, Donald Louis. The Utilization of the Electrolytic Tank in Engineering Analysis and Synthesis.

315. Chow, Chung-Wei. Transient Characteristics of a Tuned Ground-Fault Neutralizer System.

316. Correy, Thomas Berry. Weld Alloying Improvement with Square Type
Current Waves on Alternating-Current Tungsten-Arc Inert Gas
Shielded Arc Welding.

317. Dubinski, George Anthony. Systems Analysis of the ALWAC III-E Digital Computer.

318. Looney, James Chester. Nonsaturating Amplifier Theory.

319. Neuman, Frank. Speech Compression and Expansion Using Matched Thermistors.

- 320. Pearson, Gary Arthur. Interaction of the Discharge Mechanisms in A-C Corona.
- 321. Vincent, Larry William. Design of a Random Number Generator.

- 322. Banko, Keith Harland. Transfer Function Analysis of Strain Gages.
- 323. Chang, I-Cheng. Synthesis of Multiterminal RC Networks with the Aid of a Matrix Transformation.
- 324. Moustakas, Evangelos. A Method for Regulating Alternating and Direct Voltages.
- 325. Young, Gregory Lowell. Transit Time Characteristics of Multiplier Phototubes Under Pulse Conditions.

#### 1962 - Masters

- 326. Abbey, Charles Richard. Detection of Phase-Modulated Signals Using Digital Techniques.
- 327. Akkaya, Dogan Ibrahim. Lumped Model Transistor Noise Analysis.
- 328. Ballieu, Howard Lee. The Binistor as an Electronic Switching Element.
- 329. Barton, Donald Roger. An Alternating Current, Resistance Analog Network Simulator for A-C Power System Stability Studies.
- 330. Bayliss, Edward Tebben. Pulsed-Current Operation on Hall-Effect Generators.
- 331. Brown, Clyde Owen. Exploding Wire Current Pulse and the Resulting Luminous Radiation.
- 332. Culbertson, Jack Douglas. Optimal Error Magnitude Adaptive Control System.
- 333. Ewing, Gerald Dean. Low-Pass to Band-Pass Transformation in Polar Form.
- 334. Hall, Robert Leonard. The Corona Mechanism in the Presence of a Magnetic Field.
- 335. Harvey, Peter. Digital Investigation of Switching Transients from an Impedance Shunted Circuit-Breaker.
- Nakano, Yoshimi. Semi-Graphical Design of Servo-Mechanisms Using Inverse Root Locus.
- 337. Riley, Jack Carter. The Development of a Graphical Technique for the Analysis of the Performance of an Impedance Bridge.
- 338. Smithson, Stanley Alan. An Elapsed Time Interval Counter for Seismic Exploration,
- 339. Teien, Aage. Low Level D-C Detection Using a Photoconductive Modulator.
- 340. Van Calcar, Henry. Multiple-Variable Simulator for Advanced Control System Synthesis.
- 341. Wilkerson, John Lee. Transistor Circuit Design for Optimum Noise Performance.

- 342. Ballard, Benjamin J. Design, Construction and Operation of an Inter-City Microwave Network for the Oregon Educational Television System.
- 343. Chambers, Donald Ray. Schottky Emission Through Thin Aluminum-Oxide Films.
- 344. Cheng, Dan Sang. The Effect of Etches on Surface Recombination in Silicon.

345. Clark, Robert Gilder. Monitoring Surface Temperature of Irradiated Fuel Elements.

346. Copley, Terry William. An Iterative Solution to the Approximation Problem of Network Synthesis.

347. Cordy, Clifford B., Jr. Transmitter Power Requirements of Optical and Radio Communication Systems.

348. Frescura, Bert Louis. Impact Ionization in Gold-Doped Silicon.

349. Jaenicke, Richard Alex. A Transistorized Sonic Generator and Detector for Finding Young's Modulus of Wooden Beams.

350. Kim, Joong Chung. The Determination of Transformer Leakage Reactance by Using an Impulse Driving Function.

351. Leabo, Dell Patrick. Oscilloscope Sampling Converter for Observing Nanosecond Waveforms.

352. Libby, Hugo Leander. The Measurement of Metal Temperature by an Electromagnetic Induction Method.

353. Looney, James Chester. The GALAXY Memory System.

354. Magnuson, Waldo George, Jr. Variable-Width Pulse Generation Using Avalanche Transistors.

355. Magnuson, Waldo George, Jr. A Charge Sensitive Amplifier for Use with Piezoelectric Transducers.

356. Moon, Laurence Leslie. Analysis of Nuclear Reactor Period Measurements.

357. Smith, Roy John. Protection of Semiconductor Devices from Electrical Transients.

358. Woo, Kwang Bang. Performance Considerations of Parallel Control Systems.

#### 1964 - Masters

359. Arps, Ronald Barthold. Optical Character Recognition Using Mechanical Mask-Matching.

360. Bernhardt, Donn Eugene. A Fast Carry Binary Adder.

361. Bishop, Stanley Robert. A Method for Analysis of Direct-Coupled Transistor Amplifiers.

362. Christensen, Gerald Albert. A Low Power Zone-Refining System for Semiconductor Materials.

363. Fulmer, Allen Lee. SPEDTAC: A Digital Computer for Instructional Use.

- 364. Heck, Lyle Daniel. Percussive Welding of Metal-Semiconductor Contacts.
- 365. Hespelt, George Gordon. Control Circuitry for a Telemetry System.
- 366. Hill, James Carver. Logarithmic Generation by Binary Decoding.
- 367. Huaccho Salazar, Reynaldo. Design of High-Input Impedance, Wideband Transistorized Amplifiers.
- 368. Khanna, Satya Pal. The Concentration Profile of Diffused Radio-Active Antimony in a Silicon-Dioxide Layer.
- 369. King, Chia-Cheng. Digital Computer Analysis and Synthesis of Linear Feedback Control Systems Using Superposition Integrals.
- 370. Mesecar, Roderick Smit. The Galaxy Computer Control System.
- 371. Papageorge, George Elefterios. Design of an Electrical Analog for Spherical Wave Propagation in Solid Elastic Media.
- 372. Richardson, Dennis Waring. Predicting Transistor Switching Time.

373. Rux, Peter Turner. The Field-Effect Transistor as a Medium-Speed, Low-Level Chopper.

374. Senk, Frederick Martin, Jr. The Design and Evaluation of an Electronic Estimator of Probability Density Distributions.

375. Sworakowski, Michael Thomas. Electrolytic Simulation of Airfoil Flow.

 Young, Clarence Robert. Circuit Parameter Influence on Transistor-Coupled Logic.

#### 1965 - Masters

 Albright, Robert James. Two-Integrator Detector for Known-Signal-In-Noise Identification.

378. Armantrout, Guy Alan. Metal-To-Gallium Arsenide Contact Evaluation Using a VHF Bridge Technique.

379. Barker, Donald George. Synthesis of Active Filters Employing Thin-Film Distributed-Parameter Networks.

380. Churchill, Frank Tefft. An Electrolytic Tank Analog for Myoelectric Surface Potentials.

381. Comstock, James Martin. Multivariable Model for Optimizing the Percussive Welding of Aluminum.

382. Eggers, Johannes Lyle. Percussion Welding Force, Temperature and Time Relationships for Welding 6061-T6 Aluminum.

383. Hill, Douglas Glenn. Medium Frequency Solid-State Correlator.

 Johansen, Donald Grover. A Voltage-Variable Resistor Employing Feedback-Linearized Photoconductors.

 Landgraf, Richard Clark. Signal Transfer and Gain in Magnetic-Core Circuits.

386. Lindquist, Claude Steward. A Mathematical Method of Evaluating the Reliability of Electronic Equipment.

387. Mai, Chao Chen. Thermal Growth and Chemical Etching of Silicon Dioxide Films.

388. Meloy, Glenn Rogers. Optimum Transient Response of a Kaplan Turbine Generator System Determined from Mathematical Models.

389. Ou, Teh Ming. Diffusion of Boron and Phosphorus in Silicon.

 Petersen, Walter Anton. A Vector Electrocardioscope System for Clinical Studies.

 Phaloprakarn, Somkiet. Transmission Line Tower Location on Nonflat Terrain by Digital Computer Methods.

392. Puipunthavongth, Sawasdi. Determination of the Maximum Loading of Parallel Connected Three-Phase Transformers with Unequal Impedance.

393. Siddall, Mark Bernard. Superconductive A. C. Losses as a Function of an Applied Steady Magnetic Field in Type II Superconductors.

394. Sloane, John Hunt. The Development of the Theory of Metal Rolling and Its Application to Rolling Mill Control.

395. Wagner, James Daniel. A Controlled Negative-Resistance for Realization of Certain Network Functions.

#### 1965 - Doctors

- 396. Ewing, Gerald Dean. High-Efficiency Radio-Frequency Power Amplifiers.
- Manetsch, Thomas Jerome. Simulation and Systems Analysis of the United States Softwood Plywood Industry.

398. Woo, Kwang Bang. Dynamic Simulation Model of Transpiration Process with Stomatal Control Mechanism.

#### ELECTRONICS

#### SEE ALSO Electrical Engineering

#### 1960 - Masters

399. McGowan, Gerald Frank. Transistor DC Amplifier Design Theory.

#### 1961 - Masters

- 400. Chien, Hui-Ning. Variation of Delta Method for Solution of Second Order Nonlinear Differential Equations Arising in Servomechanisms.
- 401. Heimbigner, Gary Lee. A High Speed, Transistorized, Voltage Analogto-Digital Converter.

#### ENTOMOLOGY

#### 1960 - Masters

- 402. Ainscough, Bryan Drew. The Internal Morphology of Caminella peraphora Krantz and Ainscough, with Descriptions of the Immature Stages (Acarina: Trechytidae.).
- 403. Arias, Robert Ortiz. The Biology of the Grey Garden Slug, Decroceras reticulatum (Müller), Under Laboratory Conditions.
- 404. Buffam, Paul Edwin. Studies of the Biology and Effectiveness of Laricobius erichsonii Rosenh. (Coleoptera: Derodontidae), an European Predator of the Balsam Woolly Aphid, Adelges piceae (Ratz.) (Homoptera: Adelgidae).
- 405. Fellin, David Gene. The Effect of Various Cold Temperatures on the Length of Diapause of the Spruce Budworm, *Choristoneura fumiferana* (Clem).
- 406. Mitri, Talaat Khairi. The Taxonomic Value of the External Female Genitalia in the Genus Nabis Latrielle (Hemiptera: Heteroptera: Nabidae.).

#### 1961 - Masters

- 407. Carpenter, Gene Paul. The Transmission of Bean Yellow Mosaic Virus by Some Strains of the Aphid, Myzus persicae (Sulzer).
- 408. O'Berg, Allan Gillis, Jr. The Toxic Effects of Ronnel Fed to Rats for the Control of *Xenopsylla cheopis* Rothsch. (Siphonaptera, Pulicidae).

- 409. Carrillo S, Jose Luis. Biology of the Seed Chalcids Bruchophagus gibbus (Boheman) and B. roddi Gussakovskii in Oregon.
- 410. Gara, Robert Imre. A Field Approach to Study the Flight Behavior of Bark Beetle Populations (Coleoptera: Scolytidae).
- 411. Michel, Fritz Antoine. The Taxonomic Value of the Male Genitalia of the Genus Gerris Fabricius (Hemiptera: Heteroptera: Gerridae).
- 412. Sohi, Sardara Singh. Factors Affecting the Susceptibility of Bean Plants to Inoculation with Bean Yellow Mosaic Virus.
- 413. Welton, Richard Elroy. Seasonal Activities of Two Species of Eriophyid Mites on Holly and Their Relation to Foliage Damage.

414. Anderson, Aage Bernard. The Morphology and Biology of Macrovelia hornii Uhler (Heteroptera: Mesoveliidae).

415. Arunin, Aphirat. A Comparison of the Anterior Abdominal Segments

of Some Scarabaeoid Larvae.

416. Kline, LeRoy Nelson. Insect Enemies of *Dendroctonus pseudotsugae*Hopk.: Identification of Their Immature Stages and Distribution in Standing Trees.

417. McFarland, Anthony Noel. The Macroheterocera (Lepidoptera) of a

Mixed Forest in Western Oregon.

418. Pitman, Gary Boyd. Some Environmental Factors Influencing Rearing of the Spruce Budworm, *Choristoneura fumiferana* (Clem.) (Lepidoptera: Tortricidae) Under Laboratory Conditions.

#### 1964 - Masters

419. Bland, Roger Gladwin. Attractant, Behavioral, and Toxicological Studies of Fannia canicularis L. (Diptera: Muscidae) in Association with a Mink Fur Farm.

420. Eppley, Richard Keith. Studies on Heterostylum robustum (Osten Sacken) (Diptera: Bombyliidae), a Parasite of Nomia melanderi.

- 421. Johnsey, Richard Lee. The Biologies of Two Dipterous Predators of Dendroctonus pseudotsugae Hopkins (Coleoptera: Scolytidae) in Western Oregon.
- 422. Kamienski, Francis Xavier. Phospholipids of Tenebrio molitor Larvae.
- 423. Kerr, George Ezekiel. The Seasonal Occurrence and Larval Habitats of the Mosquitoes of Corvallis, Oregon (Diptera-Culicidae).
- McNicholas, Frank Joseph. Greenhouse Culture of Some Aphid Species from Woody Plants.
- 425. Osgood, Charles Edgar. Foraging and Nesting Behavior of the Leafcutter Bee *Megachile rotundata* (Fabricius).
- 426. Smith, Gordon Kent. Aphid Transmission of an Undescribed Virus from Sweet Cherry.
- 427. Willard, John Royal Alexander. Biological Activities of the Harvester Ant, *Pogonomyrmex owyheei* Cole, in Central Oregon.

- 428. Cowan, Bruce Dudley. The Biologies of Predators (Coleoptera: Cleridae) of the Douglas-Fir Beetle, *Dendroctonus pseudotsugae* Hopkins (Coleoptera: Scolytidae), in Western Oregon.
- 429. Daterman, Gary Edward. Diurnal and Seasonal Flight Patterns of Bark Beetles (Coleoptera: Scolytidae) Associated with Douglas-Fir Forests of Western Oregon.
- 430. Marsh, Terrence George. Induction of Diapause in *Colladonus montanus reductus* (Van Duzee).
- 431. Schmitz, Richard Franklin. The Effect of Competition on the Population Dynamics of the Douglas-Fir Beetle, *Dendroctonus pseudotsugae* Hopk., in Oregon.
- 432. Stimmann, Michael William. Thelytokous and Dioecious Populations of *Phenacaspis pinifoliae* (Fitch): (Homoptera: Diaspididae).
- 433. Sturgess, Brian Thomas. The Ecology of Insects Associated with Waste Water Lagoons.

434. Hodgson, Ernest. Phospholipids and Their Components in the Nutrition and Metabolism of the Blowfly, *Phormia regina* (Meig.)

435. Mitchell, Russel Gene. The Biology of the Balsam Woolly Aphid, Chermes piceae Ratz., in Oregon and Washington and the Identification and Evaluation of Its Native Predators.

#### 1961 - Doctors

436. Ryan, Roger Baker. A Biological and Developmental Study of Coeloides brunneri Vier., a Parasite of the Douglas-Fir Beetle, Dendroctonus pseudotsugae Hopk.

#### 1962 - Doctors

- 437. Arias, Robert Ortiz. The *In Vitro* Hydroxylation of Naphthalene-1-C\*\* by Housefly Microsomes.
- 438. Hargett, Louie Thomas. Visual and Olfactory Responses of the Horn Fly, *Haematobia irritans* (Linn.).
- 439. Radinovsky, Sydney. Biological, Developmental, and Behavioral Studies of *Leiodinychus krameri* (Can.) (Acarina: Uropodidae).

#### 1963 - Doctors

440. Welton, Richard Elroy. Susceptibility of Peas to Aphid Inoculation with Bean Yellow Mosaic Virus.

#### 1964 - Doctors

- 441. Carpenter, Gene Paul. Some Factors Determining the Level of Bean Yellow Mosaic Virus Transmission by Aphids.
- 442. Cram, William Thomas. Factors Affecting the Fecundity of the Root Weevils, Brachyrhinus sulcatus (F.), and Sciopithes obscurus Horn.
- 443. Jorgensen, Clive Darrel. Ecology of Mites on Pomaceous Fruit Trees and Related Wild Hosts in Hood River Valley.
- 444. Kraft, Gerald Frederick. Seasonal Occurrence and Distribution of Aquatic Insects in Berry Creek.
- 445. Sohi, Sardara Singh. Effects of Intrinsic Factors in the Transmission of Bean Yellow Mosaic Virus by Aphids.

#### 1965 - Doctors

- 446. Atkins, Michael Donald. Some Aspects of Scolytid Behaviour with Special Reference to the Douglas-Fir Beetle *Dendroctonus pseudotsugae* Hopk. (Coleoptera: Scolytidae).
- 447. Chambers, Derrell Lynn. The Endocrine Control of the Early Stages of Oöcyte Maturation in *Leucophaea maderae* (Fab.).
- 448. Gara, Robert Imre. Studies on the Flight Behavior of *Ips confusus* (Lec.) (Coleoptera: Scolytidae) in Response to Attractants.
- 449. Hendrickson, William Henry. Certain Biotic Factors Influencing the Invasion and Survival of the Douglas-Fir Beetle Dendroctonus pseudo-tsugae Hopkins (Coleoptera: Scolytidae) in Fallen Trees.
- 450. Jantz, Orlo Kenneth. Studies on the Olfactory Behavior of the Douglas-Fir Beetle, *Dendroctonus pseudotsugae* Hopkins.
- 451. Pitman, Gary Boyd. Certain Factors Affecting Colonization of Ponderosa Pine by *Ips confusus* (Leconte) (Coleoptera: Scolytidae).

#### FAMILY LIFE AND HOME ADMINISTRATION

#### 1960 - Masters

- 452. Fernandes, Afra Margaret. Behavior During Rest and the Eating Patterns of Children at Nursery School.
- 453. Griner, Verda May. Attitudes of Parents and College Students Toward Non-Nutritive Sucking by Infants.
- 454. Karuven, Malathi Muliyil. The Effect of Course-Work in Child Development and Psychology on Understanding the Behavior of Preschool Children.
- 455. O'Neill, Carol Frances Hoppe. Personality Characteristics as Correlates of Maternal Behavior in a Non-Continuous Mothering Situation.
- 456. Shea, Margaret Tannian. The Behavior of Infants and Preschool Children in a New Situation.
- 457. Smith, Marilyn Marie. Correlates of College Students' Understanding of Children's Behavior.
- 458. Walker, Patricia Ann. A Comparison of Films, Participant Observation, and Systematic Observation in Assessing Behavior.

#### 1961 - Masters

- O'Neill, John Philip. Personality Patterns and Behavioral Understanding in College Women.
- 460. Smith, Catherine Bennett. An Exploration of Adult-Infant Interaction.

#### 1962 - Masters

- 461. Anderson, Marian Faye. Child Care Arrangements Made by Families with Mothers Employed at Oregon State University.
- 462. Barnett, Larry David. Students' Anticipations of Persons and Arguments Opposing Interracial Dating.
- 463. Kronenberg, Minnie Mae. The Influence of Preschool Experience on Children's Adjustment in Kindergarten as Judged by Their Teachers.

#### 1963 - Masters

- 464. Meyer, Bonnie Martin. The Use of Time by Homemakers with Children.
- 465. Pehrson, June. Child Guidance Attitudes of Parents Who Have Children in Cooperative Nursery Schools and Those Who Do Not.

- 466. Beal, Karen. A Comparison of Oral and Written Responses to a Classroom Simulation Test.
- 467. Brown, Dorothy Furtick. The Influence of Information Given Homemakers on Old Age, Survivor and Disability Insurance in Motivating Families Toward Financial Security Planning.
- 468. Gee, Kathleen Frances. Surprise as a Reinforcing Element in Retention.
- 469. Huda, Bibi Fathul. Comparative Study of Decision Making in Meal Planning by Home Management House Students and Home Economists in Homemaking.
- 470. Paul, Janet Smetts. Observer Influence on the Interaction of a Mother and a Single Child in the Home.
- 471. Smalley, Karen Joyce. Influence-Techniques Used in Nursery School to Modify the Behavior of Children.

472. Thompson, Joanne Mann. Observer Influence on the Interaction of a Mother and a Single Child in the Presence of Two Other Preschool Siblings.

#### 1965 - Masters

- 473. Calvert, Janet Kathryn. Measurement of Attitudes of Selected Oregon
  4-H Clothing Club Members Toward 4-H Exhibiting.
- 474. Cox, Enid Elaine. Factors Related to Money Management Practices of High School Girls.
- 475. Furniss, Jean Marie. Peer Reinforcement of Behavior in an Institution for Delinquent Girls.
- 476. Miller, Dorothy Sherrill. Scales for Measuring Attitudes Toward Money.
- 477. Weldon, Bertna Frances. Young Children's Interpretation of Parental Figures: A Study of Communication in Play Interview Situations.

#### 1960 - Doctors

478. Town, Ruth. Early Adjustment of Two and Three-Year-Old Children in Church Nurseries Under Different Induction Procedures.

#### 1964 - Doctors

479. Gravatt, Arthur Eugene. Perception as a Factor in Mate Selection.

#### FARM CROPS

#### 1960 - Masters

480. Stanton, Cecil Richard. Adaptation and Agronomic Studies with Phormium, Phormium tenax Forster, in Western Oregon.

- 481. Beutler, Laurn Kemp. The Effects of Rates of Nitrogen and Dates of Planting on Winter Wheat Varieties in the Columbia Basin.
- 482. Callihan, Robert Harold. The Hard Seed Mechanism in Convolvulus arvensis L. and the Influence of Environmental Variables Upon Germination.
- 483. Crofts, Frank Clement. The Influence of Nitrogen in Extending the Grazing Season of Four Grass Species.
- 484. Echeverri, Silvio. The Association of Measurable Variables with Plant Yield in Ladino Clover.
- 485. Miltimore, James Earl. Comparison of Rooting Media and Methods in Assessing Survival of Propagules of Tall Fescue, Festuca arundinacea, Schreb.
- 486. Singh, Jyotendra Narain. The Effect of Seed Storage Conditions on Stand Establishment, Forage and Seed Production in Crimson Clover, *Trifolium incarnatum*, and Perennial Ryegrass, *Lolium perenne*.
- 487. Wilcox, Bert Guy. Yield, Protein and HCN Content of Varieties of Sudangrass, Sorghum vulgare sudanense (Piper) Hitchc., and Pearl Millet, Pennisetum glaucum L.
- 488. Wullstein, Leroy Hugh. The Ammonifying, Nitrifying and Respiration Power of Certain Soils Found in Three Habitat Types in the Columbia Basin Rangelands.

- 489. Lopez, Hernan Villanueva. Influence of the Removal of Weed Competition by Herbicides in Establishing Subterranean Clover, *Trifolium subterraneum* L.
- 490. Omid, Ahmad. The Influence of Soil Moisture and Method of Application on the Movement of the Herbicide EPTC in Soil.
- Sinha, Surendra Prasad. Specific Combining Ability Estimates in Winter Wheat Crosses.
- 492. Taylor, George Robert. The Components and Associated Variables of Seed Yield in Alfalfa, *Medicago sativa*, L.
- 493. Tetteh, Adjei. Inheritance of the Components of Yield in a Six-Row X Two-Row Barley Cross.
- 494. Walton, Richard Lee. The Seasonal Yield and Nutrient Content of Native Forage Species in Relation to Their Synecology.
- 495. Zimmermann, Charles Edward. Factors Affecting Pollen Germination and Longevity in Hops, *Humulus lupulus* L.

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- 496. Albeke, William Edgar. The Influence on Winter Wheat Yields of Competitive Weedy Species.
- Caceres, Oscar. Single Cross Progeny Evaluation in Tall Fescue, Festuca arundinacea, Schreb.
- 498. Volland, Leonard Allan. Phytosociology of the Ponderosa Pine Type on Pumice Soils in the Upper Williamson River Basin, Klamath County, Oregon.

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- 499. Al-Falahi, Tariq Salih. The Effect of Seeding Time on the Heading and Yield of Wheat in the Willamette Valley.
- 500. Bailey, Arthur Wesley. Characterization of Selected Plant Communities Within the Tillamook Burn in Northwestern Oregon.
- 501. Cinki, Sevim. The Effects of Mechanical Damage, Insect Infestation, and Storage Conditions on Seed Viability of Wheat (*Triticum vulgare*).
- 502. Culver, Roger Norman. An Ecological Reconnaissance of the Artemisia Steppe on the East Central Owyee Uplands of Oregon.
- 503. Duke, William B. The Decomposition of 2-Chloro-4-Ethylamino-6-Isoprophlamino-S-Triazine (Atrazine) and Related S-Triazine Herbicides by Soil Microorganisms.
- 504. MacKenzie, John William. The Influence of Chemical and Biological Properties on the Herbicidal Efficiency of 3-Cyclohexyl, 6-Trimethylene Uracil and 2-Bromo-6'T-Butyl-o-Acetotoluidide.
- 505. Schwabauer, Richard Allen. The Effect of Soil Mixture and Soil Cover on Residual Activity of Herbicides Measured by Seedling Emergence of *Poa annua*, L.

- 506. Al-Hassani, Madhat M. The Influence of Seeding Rate on Plant Population, Yield and Quality of Two Alfalfa (Medicago sativa L.) Varieties.
- 507. Bunch, Thomas R. Forage Production on Range Sites in East Central Malheur County, Oregon.

- 508. Carleton, Albert Eugene. Estimates of Gene Action for Heading Date and Yield in Barley.
- 509. Chung, Wei-Kwo. Phospholipids in Germinating Douglas Fir Seed. 510. Contreras, David. The Influence of Cutting Treatments on Yield and Quality of Two Alfalfa (Medicago sativa L.) Varieties.
- 511. Copeland, Ray Drew. The Evaluation of Cereal Grains, Legumes and Selected Winter Annuals as Cover Crops for the Willamette Valley.
- 512. McKinley, James Raleigh. Factors Influencing the Herbicidal Activity of Dimethyl 2, 3, 5, 6-Tetrachloroterephthalate.
- 513. Neidlinger, Thomas John. Poa annua L: Susceptibility to Several Herbicides and Temperature Requirements for Germination.
- 514. Sanders, Kenneth Dwayne. The Seasonal Yield, Quality, and Utilization of Trifolium subterraneum in Mixture with Festuca arundinacea and Lolium perenne in Western Oregon.
- 515. Thomas, Johnny Ray. Evaluation of Methods of Progeny Testing in Tall Fescue Seed Production (Festuca arundinacea, Schreb.).

- 516. Puri, Yesh Pal. Flowering Habit, Pollen Characteristics, and Seed Germination of Phormium tenax Forst.
- 517. Wilson, Donald Benjamin, Competition Among Three Pasture Species Under Different Levels of Soil Nitrogen and Light Intensity.

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- 518. Dawson, Jean Howard. The Effect of EPTC on Barnyard Grass.
- 519. Hart, Richard Harold. An Economic and Ecological Evaluation of Velvetgrass, Holcus lanatus L.
- 520. Hyder, Donald Nelson. Growth Characteristics of Crested Wheatgrass, Agropyron desertorum (Fisch.) Schult., in the Big Sagebrush-Blue-bunch Wheatgrass Province of Southeastern Oregon.

#### 1962 - Doctors

- 521. Appleby, Arnold Pierce. The Influence of Soil Temperature and Soil Placement on the Phytotoxic Properties of EPTC and Other Carbamate Herbicides.
- 522. Driscoll, Richard Stark. Characteristics of Some Vegetation-Soil Units in the Juniper Zone in Central Oregon.
- 523. Tueller, Paul Teuscher. Plant Succession on Two Artemisia Habitat Types in Southeastern Oregon.

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- 524. Bray, Donald William. Heritabilities and Associations Between Some Agronomic Characters in a Two-Row X Six-Row Barley Cross.
- 525. Kronstad, Warren Ervind. Combining Ability and Gene Action Estimates and the Association of the Components of Yield in Winter Wheat Crosses.
- 526. Sinha, Surendra Prasad. Evaluation of Methods for Predicting Yield in Early Generations of Winter Wheat Crosses.
- 527. Swearingen, Marvin LaVerne. The Effects of Ryegrass Competition and Different Nitrogen Levels on the Growth and Yields of Semi-Dwarf Wheat Varieties.

- 528. Baldwin, Richard William. The Influence of (2-Chloroethyl)-Trimethyl-Ammonium Chloride on the Ribonucletic Acid Content of Wheat (*Triticum aestivum*) Leaves.
- 529. Bradner, Norman Richard. Some Factors That Affect Pollination and Seed Formation in Alfalfa, *Medicago sativa* L.
- 530. Cooper, Clee Scott. Factors Affecting Establishment, Survival, and Production of Birdsfoot Trefoil (Lotus corniculatus L.) and Alfalfa (Medicago sativa L.)
- Crouch, Glenn Leroy. Forage Production and Utilization in Relation to Deer Browsing of Douglas-Fir Seedlings in the Tillamook Burn, Oregon.
- 532. Echeverri, Silvio. A Comparison of Progeny Testing Methods and Estimates of Combining Ability for Seed Yield and Associated Variables in Tall Fescue (Festuca arundinacea, Schreb.)
- 533. Gould, Walter Leonard. Indole-3-Acetic Acid in (2-Chloroethyl)Trimethylammonium Chloride-Treated Club Wheat (*Triticum aestivum compactum*).
- 534. Omid, Ahmad. The Effect of Quackgrass (Agropyron repens) Rhizomes on Germination and Development of Alfalfa.
- 535. Radcliffe, John Clive. The Survival of Rhizobia on Seeds of Trifolium subterraneum L.

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- 536. Abu-Shakra, Salah Suleiman. Biochemical Study of Aging in Seeds.
- 537. Lee, William Orvid. The Distribution, Growth Habits, and Control of German Velvetgrass (Holcus mollis L.) in Western Oregon.
- 538. Matheson, Keith Isom. The Breeding Behavior of Forage Yield in Two Populations of Tall Fescue, (Festuca arundinacea, Schreb.)
- 539. Von Amsberg, Hans Joachim. Floral and Vegetative Development in *Dactylis glomerata* as Influenced by Different Temperature Levels and Durations.
- 540. Young, James Albert. Forage Production and Utilization in a Mixed Conifer Forest in the Wallowa Mountain Foothills.

#### FISH & GAME MANAGEMENT

SEE ALSO Fisheries, Wildlife Management

#### 1960 - Masters

- 541. McCann, John Albert. An Analysis of Factors Influencing Road Kill of Pheasants in the Willamette Valley.
- 542. McCullough, Dale Richard. An Ecological Study of the Columbian Black-Tailed Deer in a Logged Environment.

- 543. Breuser, Raymond Nowlin. Foods and Growth of Juvenile Coho Salmon Oncorhynchus kisutch (Walbaum), and Chinook Salmon Oncorhynchus tshawytscha (Walbaum) in Certain Oregon Streams.
- 544. Hines, William Wester. Comparison of Two Direct Observation Techniques for Enumerating Columbian Black-Tailed Deer in Western Oregon.

545. Carter, Bernie Earl. Relationships Between Spring and Fall Populations of Confined *Microtus montanus* (Peale).

546. Pedersen, Richard Jerome. The Life History and Ecology of Townsend's Mole Scapanus townsendii (Backman) in Tillamook County, Oregon.

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547. Smith, Jerome Stafford. Effects of Dispersion and Parent Population Density on Enclosed Populations of *Microtus montanus* (Peale).

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548. Neff, Don Johnson. The Effects of Clipping on the Vigor of Big Game Browse Plants and Related Studies in the Arizona Chaparrel.

#### FISHERIES

#### SEE ALSO Fish and Game Management

#### 1960 - Masters

- 549. Coble, Daniel Wiggin. The Influence of Environmental Conditions in Redds on the Survival of Salmonid Embryos.
- 550. Davis, Gerald Everett. The Influence of Dissolved Oxygen Concentration on the Swimming Performance of Juvenile Coho Salmon at Different Temperatures.
- 551. Isaac, Gary William. Standing Crops of Fish in Oregon Farm Ponds.
- 552. Leonards, Laurie. Experiments on Salmonid Fish Bypassing Employing a New Apparatus at a Screened Diversion Canal.
- 553. McIntire, Charles David. Effects of Artificial Fertilization on Plankton and Benthos Production in Four Experimental Ponds.
- 554. Miller, George Carl. The Taxonomy and Certain Biological Aspects of the Crayfish of Oregon and Washington.
- 555. Shumway, Dean Lee. The Influence of Water Velocity on the Development of Salmonid Embryos at Low Oxygen Levels.
- 556. Silver, Stuart Jayson. The Influence of Water Velocity and Dissolved Oxygen on the Development of Salmonid Embryos.

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- 557. Demory, Robert LeRoy. Foods of Juvenile Coho Salmon and Two Insect Groups in the Coho Diet in Three Tributaries of the Alsea River, Oregon.
- 558. Garrison, Robert Leon. Metabolism of Algal Communities in Experimental Streams.
- 559. Toner, Richard Charles. An Exploratory Investigation of the Embryonic and Larval Stages of the Bay Mussel, *Mytilus edulis* L., as a Bioassay Organism.
- 560. Wallace, Richard Lee. An Analysis of Adult Steelhead Trout Returns to the Alsea River from Hatchery Releases in 1956 and 1957.

- Phillips, Robert Wilson. A Questionnaire Survey of Fish Pond Practices in Oregon.
- 562. Stewart, Nelson Eugene. The Influence of Oxygen Concentration on the Growth of Juvenile Largemouth Bass.

563. Brockway, Donald Lee. Some Effects of Sub-Lethal Levels of Pentachlorophenol and Cyanide on the Physiology and Behavior of a Cichlid Fish, Cichlasoma biamculatum (Linnaeus).

564. Campbell, Honor Jerome. Age, Growth, and Management of Channel

Catfish, Ictalurus punctatus (Rafinesque), in Oregon.

565. Dahlberg, Michael Lee. Influence of Dissolved Oxygen and Carbon Dioxide on the Sustained Swimming Speed of Juvenile Largemouth Bass and Coho Salmon.

566. Fisher, Richard Joseph. Influence of Oxygen Concentration and of Its

Diurnal Fluctuations on the Growth of Juvenile Coho Salmon,

567. Hansen, David. The Influence of Natural Mortality and Other Life History Factors on the Yield to the Angler of Planted Cutthroat Trout in Munsel Lake, Oregon.

568. Hansen, Harold Leroy. Fish Production and Fishing Success in Four

Experimental Warmwater Fish Ponds.

569. Higley, Duane Lee. Food Habits, Growth, and Production of Juvenile Spring Chinook Salmon Oncorhynchus tshawytscha (Walbaum), in a Eutrophic Reservoir.

570. Mason, John Christopher. Life History and Production of the Crayfish, Pacifastacus leniusculus trowbridgii (Stimpson), in a Small Wood-

land Stream.

#### 1964 - Masters

571. Fortune, John David, Jr. Distribution of Kokanee (Oncorhynchus nerka) Fingerlings in Summer as Related to Some Environmental Factors.

572. Lowry, Gerald Roger. Net Production, Movement, and Food of Cutthroat Trout (Salmo clarki clarki Richardson) in Three Oregon Coastal Streams.

573. Reimers, Paul Edward. Distribution of Fishes in Tributaries of the Lower Columbia River.

574. Young, Franklin Robert. Growth and Production of Warmwater Fishes as Influenced by Experimental Stocking Combinations.

#### 1965 - Masters

575. Chapman, Gary Adair. Effects of Sub-Lethal Levels of Pentachlorophenol on the Growth and Metabolism of a Cichlid Fish.

576. Lane, Charles Bertell. Metabolism of Periphyton Communities in Two Small Streams.

577. Will, Theodore. Temperature Effects on Pacific Oyster Embryos Subjected to Spent Sulfite Liquor.

#### 1961 - Doctors

578. Chapman, Donald Wallace. Factors Determining Production of Coho Salmon, Oncorhynchus kisutch, in Three Oregon Streams.

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579. Davis, Gerald Evert. Trophic Relations of Simplified Animal Communities in Laboratory Streams.

580. DeWitt, John William, Jr. Effects of Pollutional Conditions on Stream

Organisms with Especial Emphasis on Stonefly Naiads.

581. Horton, Howard Franklin. The Factors Leading to Post-Liberation Mortalities of Trout Transported in Tank Trucks.

582. Coche, André Georges. Net Production of Juvenile Steelhead, Salmo gairdneri Richardson, in a Freshwater Impoundment.

# FOOD AND DAIRY TECHNOLOGY

SEE Food Science and Technology

# FOOD INDUSTRIES

SEE Food Science and Technology

# FOOD SCIENCE AND TECHNOLOGY

SEE ALSO Foods and Nutrition

#### 1960 - Masters

583. Artar, Orhan Galip. Effect of Pre-Irradiation Heating on the Flavor and Nitrogenous Constituents of Beef During Storage.

584. Chandrasekharappa, Gowdara. The Effect of Ionizing Radiations of the Storage Stability of Hydrogenated Shortening Treated with Certain Antioxidants.

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586. Korten, Charles William. Changes in Nitrogenous and Sensory Characteristics During Storage of Precooked Irradiated Pork.

587. Thomas, Robert Irvin. Rumen Volatile Fatty Acids as Affected by Alfalfa Hay Fed in Various Forms.

588. White, Richard Jean. Occurrence and Control of the Brown Precipitate Defect in Making Cottage Cheese.

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589. Blair, Carolyn Jane. The Effects of Time-Temperature Relationships on the Nitrogenous Constituents of Stored Irradiated Beef.

590. Crawford, David Lee. The Effect of Methylation Upon the Antioxidant and Chelation Capacity of Quercetin and Dehydroquercetin in a Lard Substrate.

591. El-Badawi, Ahmed Adel Ismail. Color and Pigments of Packaged Refrigerated Beef.

592. Gallop, Reginald Ambrose. The Spin Cooking and Spin Cooling of Canned Fruit Products.

593. Kuboyama, Morio. A Simplified Technique for Milk Protein Determination by the Dye-Binding Method.

594. Lillard, Dorris Alton. Relationship of the Organoleptic to Chemical Methods for Measuring Intensity of Oxidized Flavor in Milk Fat. 595. Maragoudakis, Michael Emmanuel. The Ripening of Cheddar Cheese

Made with Rennet as Compared with a Rennet-Like Substitute.

596. Palmateer, Robert Edwin. An Accelerated Oxidation Method for the Estimation of the Storage Life of Frozen Seafoods.

597. Rasulpuri, Muhammad Latif. Objective Quality Tests in Evaluating Frozen Strawberries.

598. Rege, Umanath Yeshwant. Isolation and Characterization of Some Active Principles from Commercial Rennet Extract.

599. Scholz, Dorothy June. Radiation Pasteurized Shrimp and Crabmeat.

- 600. Gizis, Evalgelos John. Color Changes in Berries During Processing and Storage.
- 601. Gomez, Leticia Pangilinan. Vitamin K<sub>5</sub> as a Good Preservative.
- 602. Mickalek, John Elizabeth. A Method for the Determination of Vitamin K<sub>5</sub> in Fruits and Vegetables.
- 603. Miller, Phillip Harry. Identification of Flavor Components of Loganberry Essence.
- 604. Mohasseb, Zeinab Shehata. Electrophoretic Patterns of Fresh, Irradiated-Pasteurized and Irradiated-Sterilized Beef Stored at 34° F.

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- 605. Awad, Ahmed Ali. Radiation Pasteurization of Raw and Chlortetracycline-Treated Shrimp.
- 606. Boziotis, Constantinos Andreas. Diffusion of Sugar, Acids and Pigments During Processing and Storage of Canned Berries.
- 607. Daravingas, George Vasilios. Changes in Raspberry Pigments During Processing and Storage.
- 608. Farrier, Ray Wesley. The Texture and Appearance of Dual Blanched Frozen Green Beans.
- 609. Khatri, Lakho Lilaram. Isolation and Determination of the Free Fatty Acids of Milk Fats.
- 610. Papaioannou, Stamatios Evangelos. An Investigation of the Carbonyl Compounds in Gamma Irradiated Milk Fat.
- 611. Rao, Akkinapally Venketeshwer. Effect of Processing and Storage on the Texture of Canned Berries.

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- 612. Bills, Donald Duane. A Method for the Determination of the Free Fatty Acids of Cheddar Cheese.
- Hilderbrand, Kenneth Stephen, Jr. Direct Injection Gas Chromatography of Volatiles from Fishery Products.
- 614. Huang, Anita Wong. The Fatty Acid Composition of Tissues From Swine Fed Fresh and Oxidized Menhaden Oil Containing Certain Antioxidants.
- 615. Landsberg, Johanna Dobrot. *In Vitro* Inhibition of Lipase Activity by Malonaldehyde, Formaldehyde and Propionaldehyde.
- Langler, James Edward. Factors Influencing Methyl Ketone Formation in Milk Fat.
- Reddy, Gundlagutta Mahadeva. The Effect of Chemical Composition on the Reconstruction Characteristics of Dehydrated Blue Lake Green Beans.
- 618. Serrano, Lolita Bate. Determination of the Quality of Radiation-Pasteurized Halibut (Hippoglossus stenolepis) During Storage.
- 619. Wong, Marianne Miu-Ling. The Effect of Processing on the Chemical Composition and Texture of Chinese Waterchestnut, *Eleocharis dulcis*.
- 620. Wong, Millie Miu-yee. Effect of Processing Methods on the Chemical and Physical Properties of Soybean Milks.

- 621. Kintner, Judith Ann. Studies of the Major Free Fattty Acids in Milk.
- 622. Merrifield, Larry Stanford. Factors Affecting the Antimicrobial Activity of Vitamin Ks.

623. Orser, Robert Eugene. Gas Chromatography of Fermentation Products of Different Yeast Strains.

624. Rampton, James Henry. Fractionation of Bovine Sarcoplasmic Proteins by DEAE-Cellulose Chromatography.

625. Saeed, Mohammad. Suitability of Pollinizing Varieties of Pears for Dehydration.

626. Shiflett, Maureen Adele. Preservation of Dover Sole by Low-Dose Radiation and Antimicrobial Agents.

627. Ting, Chao-Yun. Partial Purification of Cathepsins from Salmon Muscle.

### 1962 - Doctors

628. Rajan, Thillasthanam Seshadri. The Role of Dihydroquercetin as an Antioxidant for Some Dairy Products.

## 1963 - Doctors

- 629. El-Badawi, Ahmed Adel Ismail. The Nature of Hydrative Changes and Cationic Shifts in the Over-Tenderization of Beef Muscle Resulting from Irradiation.
- 630. Gallop, Reginald Ambrose. The Relationship of Processing Method to the Physicochemical Changes Which Occur in Processed Soft Fruits.
- 631. Mohasseb, Zeinab Shehata. Fractionation of Bovine Muscle Proteins by Cellulose Ion Exchange Chromatography.
- 632. Rege, Umanath Yeshwant. The Mechanism of Clotting of Milk by Rennin.

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- 633. Gizis, Evangelos John. The Isolation and Characterization of the Pectic Enzymes and the Pectic Substances of the Northwest Strawberry.
- 634. Lillard, Dorris Alton. The Autoxidative Degradation of Some Secondary Products of Autoxidizing Lipids.
- 635. Rasulpuri, Muhammad Latif. Mode of Action of Vitamin Ks on Saccharomyces cerevisiae.

#### 1965 - Doctors

636. Lindsay, Robert Clarence. Flavor Chemistry of Butter Culture.

# FOOD TECHNOLOGY

SEE Food Science and Technology

# FOODS AND NUTRITION

SEE ALSO Food Science and Technology

#### 1960 - Masters

637. Jarvis, Helen Wilma. The Ascorbic Acid, Dehydroascorbic Acid and Diketogulonic Acid Content of Canned and Frozen Fruit Juices and Beverages in Relation to Cost.

638. Lowry, Joanne. The Chemical Composition, Certain Rheological Proper-

ties, and the Shortening Power of Fat.

639. Lyman, Shirley Catherine. The Effect of Freezing on Microscopic Structure and Palatability of French Fried Potatoes.

640. Moon, Soo Jae. Changes in Concentrations of Riboflavin in Human Blood Fractions Following Test Doses of the Vitamin.

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- 641. Black, Verna Mae. Characteristics of Frozen Peaches as Affected by Prefreezing Treatments.
- 642. East, Dorothy May. Reduction of Microbial Population of Seafood by Radiation Pasteurization.
- 643. Pohl, Patricia Henry. Application of the Freeze-Drying Technique for the Microscopic Study of Fat in Cake Batter.
- 644. Smith, Elveda. Concentrations of Free and Total Cholesterol in Human Blood Fractions.

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- 645. Paasche, Bette Marie. Pectin in Tomatoes as a Protective Colloid for Casein.
- 646. Phillips, Carmen Ford. Phenolic Compounds in Bartlett Pears and Their Relation to Discoloration of the Canned Product.

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647. Borchgrevink, Nancy Carter. Relation of Color in Cooked Carrots to Carotene Content as Determined by Chromatographic and Spectrophotometric Methods.

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- 648. Park, Sookja. Non-Esterified Fatty Acids in Human Serum and Erythrocytes.
- 649. Peters, Jean McLeod. Problems in the Microbiological Determination of Vitamin B₀ in Blood.
- 650. Ury, Renata Mae. Problems Encountered in Measuring the Leucoanthocyanin Content of Pears.

#### 1965 - Doctors

651. Smith, Elveda. The Lipids in Human Blood Fractions.

# FOREST ENGINEERING

SEE ALSO Forest Management

### 1962 - Masters

652. Bryant, Harry Richard. Some Relations of Slope Development to Forest Engineering.

#### 1965 - Masters

653. Stringer, Terence Neil. An Economic Comparison of the Construction of Coastal Logging Roads by Power Shovel and Tractor.

# FOREST ENTOMOLOGY

SEE Entomology

# FOREST MANAGEMENT

# SEE ALSO Forest Engineering, Forest Products, Forest Products Chemistry

### 1960 - Masters

- 654. Berry, Dick Wallace. A Comparison of the Harmonized Curve and the Combined Variable Methods of Cubic-Foot Volume Table Construction.
- 655. Kasile, Joseph David. A Comparison of the Double Plot and the Fixed Area-Plot Sampling Systems for Arriving at Intensive Forest Management Data.
- 656. Krueger, Kenneth William. The Influence of Time of Establishment and Competition on the Comparative Heights of Second-Growth Douglas-Fir Trees.
- 657. Newton, Michael. Progress in Chemical Control of Certain Weed Trees, Shrubs, and Grasses on Forest Lands in Western Oregon.
- 658. Wommack, Donald Everett. Effect of Winter Chilling and Photoperiod on Growth Resumption in Douglas-Fir, *Pseudotsuga menziesii* (Mirb.) Franco.

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- 659. Carmichael, Ralph L. Certain Physical Characteristics of the Wax of the Leaves of Douglas-Fir, Pseudotsuga menziesii (Mirb.) Franco.
- 660. Franklin, Jerry Forest. Regeneration Patterns on Some Modified Staggered-Setting Clearcuts on the H. J. Andrews Experimental Forest.
- 661. Lundgren, John Wollan. The Construction of Stand Aerial Photo-Volume Tables for Second-Growth Douglas-Fir.

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- 662. Bradley, Robert F. Survival of Planted Douglas-Fir Seedlings on Severe Sites Using the Paper Sheet Mulch Planting Method.
- 663. Hazard, John William. A Plan of Timber Management and of Road Development for Tract B in the Wassen Creek Drainage of Northwest Douglas County, Oregon.
- 664. Howland, James Rodney. Some Factors Affecting Douglas-Fir Seedling Growth and Establishment.
- 665. Mason, Benjamin Jordan. The Response of Individual Douglas-Fir Trees to Applications of Inorganic Fertilizers.
- 666. Sanders, Robert Charles. A Plan of Timber Management and of Road Development for Tract A In the Wassen Creek Drainage of Northwest Douglas County, Oregon.

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667. Schultz, Robert Paul. Occurrence of Stump Callusing in Second-Growth Douglas-Fir (*Pseudotsuga menziesii* (Mirb.) Franco).

- 668. Livingston, Gordon Kay. The Influence of Moisture and Temperature on the Preservation of Douglas-Fir Pollen by Freeze-Drying.
- 669. Norris, Logan Allen. Some Factors Affecting Absorption and Translocation of Phenoxyalkylcarboxylic Acids in Plants.

- 670. Pfister, Robert Dean. Effects of Artificial Cone Ripening Techniques and Determination of Seed Maturity in Grand Fir (Abies grandis Lindl).
- 671. Zavitkovski, Jaroslav. The Effect of Drought on the Rate of Photosynthesis, Respiration, and Transpiration in Two Ecotypes of Douglas-Fir (Pseudotsuga menziesii (Mirb.) Franco).

- 672. Johnson, Le Roy Curtis. Effect of Light Quality and Periodicity Upon Germination of Douglas-Fir Seed (*Pseudotsuga menziesii* (Mirb.) Franco) and on Growth of Douglas-Fir Seedlings.
- 673. Munro, Donald Deane. An Analysis of the Weighted Least Squares
  Technique as a Method for the Construction of Tree Volume Tables.
- 674. Williamson, Richard Lee. Silvicultural and Economic Aspects of Removal of Scattered Overmature Trees from a Well-Stocked Pole Stand in the Sitka Spruce-Western Hemlock Type.

### 1963 - Doctors

- 675. Berry, Dick Wallace. An Ecological Study of a Disjunct Ponderosa Pine Forest in the Northern Great Basin in Oregon.
- 676. Merriam, Lawrence Campbell, Jr. The Bob Marshall Wilderness Area of Montana; A Study in Land Use.

#### 1964 - Doctors

- 677. Sorensen, Frank Curtis. Photosynthesis, Respiration, and Dry Matter Accumulation of Douglas-Fir Seedlings from Different Geographic Sources and Growth at Different Temperatures.
- 678. Strand, Robert Fenton. Soil and Growth Studies in Douglas-Fir (Pseudotsuga menziesii (Mirb.) Franco).
- 679. Wommack, Donald Everett. Temperature Effects on the Growth of Douglas-Fir Seedlings.

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# SEE ALSO Forest Management, Forest Products Chemistry

#### 1960 - Masters

- 680. Burrows, Charles Henry, Jr. Some Factors Affecting Resin Efficiency in Wood Flakeboard.
- 681. Krahmer, Robert Lee. Some Anatomical Features of Douglas-Fir Wood Rated Permeable and Refractory.
- 682. Prichananda, Chongrak. Effect of Air Temperature and Humidity at Different Pressures on Rate of Air Flow Through Apparatus Designed for Indicating Permeability of Wood.

- 683. Highley, Terry L. The Flavonoid Compounds of Three Floral Phenotypes of Douglas Fir.
- 684. McMinimy, Lawrence Otto. A Study of Several Anatomical Variables in Relation to Their Effect on Tensile Strength of Douglas-Fir.
- 685. Nicholas, Darrel Dean. The Influence of Environment, Genetics and Growth Characteristics on Tracheid Length and Specific Gravity Variation in a Douglas-Fir Provenance Study.

686. Manners, Gary Duane. The Chemical Composition of the Bark Extractives of Four Species of the Genus Pseudotsuga.

# FOREST PRODUCTS CHEMISTRY

#### 1960 - Masters

687. Carlberg, Gary Lawrence. A Comparison of the Extractives from Four Species of True Firs.

#### 1962 - Masters

688. Lenz, Bernard L. Hydrotropic Pulping of the Bark from Douglas Fir (*Pseudotsuga menziesii* (Mirb.) Franco) and the Characterization of the Resulting "Bark Phenolic Acid."

#### 1963 - Masters

689. Swelim, Ahmed Abdel-Moniem. A New Procedure for the Determination of Holocellulose.

#### 1964 - Masters

690. Peterson, William Emery. Hydrogenation and Hydrogenolysis Products from Bark Phenolic Acids.

#### 1961 - Doctors

691. Holmes, George William. The Chemical Composition of the Extractives from the Newly Formed Inner Bark of Douglas Fir, *Pseudotsuga menziesii* (Mirb.) Franco.

### 1963 - Doctors

692. Wilson, Jim Degnan. The Isolation and the Properties of the Bark Phenolic Acids from Mountain Hemlock *Tsuga mertensiana* (Bong.) Car.

# GAME MANAGEMENT

SEE Fish and Game Management, Wildlife Management

### GENERAL SCIENCE

# 1960 - Masters

693. Washington, Warren Morton. Lee-Waves of an Isolated Mountain During Rainstage.

#### 1961 - Masters

694. Lauritsen, Don Alan. Humphreys Spiral Beneficiation of Sulfide Ores from the Bohemia District Musick Mine.

### 1965 - Masters

695. Meegungwan, Chongchit. Evidence for an Intermediate Related to Oxidative Phosphorylation in Mitochondria from Blowflies, *Phormia regina*.

696. Braswell, Audrey Lee, Jr. The Ecology of Lepidurus apus in Northern Utah and Some Limnological Requirements for Hatching.

697. Willis, David Lee. Radiotracer Methodology in Biological Science.

### 1965 - Doctors

698. Fryback, William Herbert. Evaluation of Multi-Level Reading Materials, Intra-Class Discussion Techniques and Student Experimentations on Achievement in Fifth Grade Elementary Science.

# GENERAL STUDIES

#### 1960 - Masters

699. Schmelzlee, Robert Paul. A National Lumber Exchange in Portland.

#### 1962 - Masters

700. Goodearl, Arthur William. Academic Preparation of American Business Executives for Foreign Service.

701. Nitidandhaprabhas, Smorn. Thai Rural Family Life in Transition.

#### 1963 - Masters

702. Palmer, Joyce Eileen. A Study of Drop-Outs from the Accelerated Mathematics Classes of the Portland Public Schools, Portland, Oregon.

703. Stanton, Coralie Cassell. The Aurora Colony, Oregon.

### 1964 - Masters

704. Fedde, Gabriel Bernard. The Norwegian-Swedish Crisis of 1905.

#### 1965 - Masters

705. Merrill, John Russell. Development of Proceedings for an Urban Renewal Project: The Esther Short Project.

Segal, Jack. The Jews of Portland (Oregon): Their Religious Practices and Beliefs.

### GENETICS

### 1960 - Masters

707. Bray, Donald William. Some Factors Affecting Hybridization of Tall Fescue, Festuca arundinacea, Schreb., in Polyethylene-Covered Enclosures.

### 1962 - Masters

708. Hoornbeek, Frank Kent. Some Genetic and Environmental Factors Associated with Performance and Carcass Traits of Beef Cattle.

709. Joppa, Leonard Robert. Genetic Variability in Four Genotypes of Tall

Fescue (Festuca arundinacea Schreb).

710. Waud, Jack Lloyd. Inheritance of Resistance to Physiologic Races T-1, T-15, T-16 of *Tilletia caries* (D. C.) Tul. and Race L-8 of *Tilletia foetida* (Wallr.) Liro in Hybrids of P. I. 178210 and Elgin Wheat.

## 1963 - Masters

711. Chapman, Verne Merrill. Genetic and Environmental Influences Upon Litter Size and Variation of Birth Weights in Berkshire Swine. 712. Plotka, Edward Dennis. Genetic and Physiological Factors Associated with Gonadotropic and Thyrotropic Hormone Content of Sheep Pituitaries.

#### 1964 - Masters

- 713. Mahn, Siegfried. The Skeletal Basis of Breast Width in the Domestic Fowl.
- 714. Yodseranee, Somchit. Relationship of Certain Blood Nitrogen Constituents with Growth in Different Genetic Groups of Sheep.

#### 1965 - Masters

715. Keeler, Joseph Lambert. The Relationship of Initial Weight to Growth Rate in Preweaning Pigs.

#### 1960 - Doctors

- 716. De Baca, Roberto Luciano C. Genetic, Environmental, and Residual Maternal Influences on Cow Productivity and Growth of Calves.
- 717. Sabin, Samuel Waybright. Analyses of Physical Sources of Variation in Estimated Genetic Growth Parameters in Beef Cattle.

#### 1961 - Doctors

- 718. Brooks, Stanley Nelson. Variability of Morphological and Chemical Quality Characteristics in Flowers of Male Hops, Humulus lupulus L.
- 719. Miltimore, James Earl. Factors Influencing Survival of Tall Fescue (Festuca arundinacea, Schreb.) Propagules.
- 720. Wilson, Marvin L. A Method of Breeding for Resistance to Fusarium and Bacterial Wilt in Alfalfa.

#### 1962 - Doctors

721. England, Noah Clinton. Genetic and Environmental Factors Influencing Appetite in Beef Cattle and the Relation of Appetite to Rate and Efficiency of Gain.

#### 1963 - Doctors

- 722. Ampy, Franklin Roosevelt. Nitrogenous Constituents in the Blood of Four Lines of Calves.
- 723. Busch, Robert Edward. The Inheritance of Growth and Carcass Characteristics in Sheep.
- 724. Jessup, Gordon Lee, Jr. Nonprotein Nitrogenous Constituents of the Blood in Relation to Rumen Development and Growth in Suckling Lambs.

#### 1964 - Doctors

725. Addleman, Albert Duane. Certain Genetic and Maternal Environmental Influences on Growth Rate and Body Composition of Lambs.

### 1965 - Doctors

- 726. Chapman, Verne Merrill. Selection for Hybrid Female Reproductive Performance in the Mouse.
- 727. Hoornbeek, Frank Kent. Selection Applied, Response of Traits and Combining Abilities of Inbred Lines of Beef Cattle.

# **GEOLOGY**

#### 1960 - Masters

- 728. Greene, Frank Felloes. Geology of the Northeast Corner of the Sparta Quadrangle and Vicinity, Oregon.
- 729. Johnson, George Daniel. Geology of the Northwest Quarter Alvord Lake Three Quadrangle, Oregon.
- 730. Taylor, Edward Morgan. The Geology of the Clarno Basin, Mitchell Quadrangle, Oregon.
- 731. Wetherell, Clyde Elbert. Geology of Part of the Southeastern Wallowa Mountains, Northeastern Oregon.

#### 1961 - Masters

- 732. Bubb, John Neal. Geology of Part of the Greenhorn Range and Vicinity, Madison County, Montana.
- 733. Christie, Harold Hans. Geology of the Southern Part of the Gravelly Range, Southwestern Montana.
- 734. Maloney, Neil Joseph. Geology of the Eastern Part, Beaty Butte Four Quadrangle, Oregon.
- 735. Manske, Douglas Charles. Geology of the Baldy Mountain Area, Madison County, Montana.

#### 1962 - Masters

- 736. Carnahan, Gary Leon. Geology of the Southwestern Part of Eagle Cap. Quadrangle, Wallowa Mountains, Oregon.
- 737. Jarman, Gary Davis. Recent Foraminifera and Associated Sediments of the Continental Shelf in the Vicinity of Newport, Oregon.

### 1963 - Masters

738. Lukanuski, James Nick. Geology of Part of the Mitchell Quadrangle, Jefferson and Crook Counties, Oregon.

## 1964 - Masters

- 739. Hill, David Ray. Geology of the Whetstone Anticline Area, Teton County, Wyoming.
- 740. Lembach, Dixie Jane. Fauna of the Permian Rocks Near Quinn River Crossing, Nevada.
- 741. McKnight, Brian Keith. A Stratigraphic Study of the Marine Cretaceous Rocks Near Mitchell, Oregon.
- 742. White, Willis Harkness. Geology of the Picture Gorge Quadrangle, Oregon.

# 1965 - Masters

743. Alexander, John Byron. Stratigraphy and Structure of Part of the Fish Lake Plateau, Sevier County, Utah.

# 1965 - Doctors

744. Glenn, Jerry Lee. Late Quaternary Sedimentation and Geologic History of the North Willamette Valley, Oregon.

### GUIDANCE

SEE Guidance and Personnel

# GUIDANCE AND COUNSELING

SEE Guidance and Personnel

# GUIDANCE AND PERSONNEL

SEE ALSO Education

#### 1963 - Doctors

- 745. Casebeer, Arthur Larkin. Student Democratic Values Within Various Administrative Climates of Selected Colleges and Universities.
- 746. Lakin, Frank Pierce. Factors Relative to a Grade Point Average Increase for a Select Group of Students After Matriculation to Oregon State University.
- 747. Sanders, Charles Douglas. Student Personnel Services in Negro Colleges of the South Atlantic States.

#### 1965 - Doctors

748. Howard, Lorraine Harris. A Comparison of Freshmen Attending Selected Oregon Community Colleges and Oregon State University in Terms of Interests, Values, and Manifest Needs.

# HEALTH EDUCATION

SEE ALSO Education

### 1962 - Masters

749. Yeager, Donald Jesse. Neuromuscular Responses of Senior High School Boys.

### HIGHWAY ENGINEERING

SEE Civil Engineering

### HOME ADMINISTRATION

SEE Family Life and Home Administration

### HOME ECONOMICS EDUCATION

- 750. Anderson, Hazel Duncan. Implications for Homemaking Education Derived from Homemaking Practices and Problems of Selected Employed Mothers in Malheur County, Oregon.
- 751. Applonie, Evelyn Mildred. Selected Practices in Student Teaching Programs in Institutions in the United States Approved to Grant Vocational Home Economics Certificates.
- 752. Grieve, Mary Jane. Developing a Student-Teacher Cooperatively Planned Program for Advanced Homemaking.
- 753. Kienzle, Marian Templeton. Homemaking Education Programs for Early Adolescents in 223 Representative Schools Throughout the United States.
- 754. Sollie, Alice Jeanette. Goals, Beliefs, and Practices of Oregon Secondary Homemaking Teachers in Teaching Clothing Construction.

755. Walsh, Ann Louise. Some Practices in Home Economics Student Teaching Which Produce Satisfactory Supervisory Relationships.

#### 1961 - Masters

756. Matsushima, Chiyono. Some Beliefs of Mothers About Home Economics Education in Secondary Schools.

757. Pernice, Laura Mae. Beliefs of Selected Laywomen Concerning the Teaching of Home Economics to Junior and Senior High School Pupils.

#### 1962 - Masters

758. Burklund, Betty Ann. Secondary Homemaking Students' Attitudes Towards Self-Directive Learning Experiences.

### 1963 - Masters

759. Lea, Sonya Ann. Beliefs Concerning Oregon State University Home Economics Courses for Potential Secondary Home Economics Teachers.

760. Park, Ruth Stermer. Evaluation of Secondary Homemaking Education in Bend, Oregon.

### 1964 - Masters

 Johnson, Nancy Lea. Secondary School Counselors' Beliefs Concerning Home Economics.

#### 1965 - Masters

- 762. Milbrath, Margaret Lucille. Developing an Adult Homemaking Course:
  Textiles for Homemakers.
- 763. Moe, Estora Ricks. Developing Creativity in High School Home Economics Students Through the Teaching of a Home Furnishings Unit.
- 764. Pubols, Jane Frances. Selected Beliefs and Practices of Oregon Secondary Home Economics Teachers Relating to Enrollment in Home Economics Classes.
- 765. Schaffer, Ruby Elaine. Beliefs of Home Economics Teachers in British Columbia Concerning Courses for Grade 12 Students.

### HOME MANAGEMENT

SEE Family Life and Home Administration

### HORTICULTURE

### 1960 - Masters

- Hess, Wilford Moser. Inheritance of Growth Habit in Bush Bean, Phaseolus vulgaris L.
- 767. Smith, Vernon Norman. The Influence of Concentration and Ratio of Nitrogen and Phosphorus in the Rooting Medium Upon Nitrogen and Phosphorus in the Leaves of the Anjou Pear Trees.

- 768. Olez, Hayati. Meiosis, Pollination and Incompatibility in Bartlett and Seckel Pears.
- 769. Rauch, Fredrick Donald. The Differential Response of Ligustrum ovalifolium and Pyracantha spp. to Simazine.

770. Rosario, Theodore. Effects of Boron Applications on Growth, Yield, and Boron Content of Snap Beans.

#### 1964 - Masters

771. Lopez-Garcia, Justo. Effect of Temperature and Zinc on Development of Tobacco Mosaic Virus in Resistant and Susceptible Tomatoes.

772. Zehsazian, Hassan. Date of Planting as a Factor in the Growth, Development, and Yield of Snap Beans.

#### 1961 - Doctors

773. Weiser, Conrad John. The Physiological Role of Boron in the Rooting of Hypocotyls of *Phaseolus vulgaris* L.

### 1963 - Doctors

774. Davis, David Warren. Quantitative Inheritance of Growth Habit in the Bush Bean, *Phaseolus vulgaris* L.

775. Li, Pen Hsiang. Metabolism of Pears in Modified Atmospheres.

#### 1964 - Doctors

776. Singh, Jyotendra Narain. Effects of Modifying the Environment on Flowering, Fruiting, and Biochemical Composition of the Snap Bean (Phaseolus vulgaris L.)

### HYDRAULIC ENGINEERING

SEE Civil Engineering

# INDUSTRIAL ARTS EDUCATION

### 1960 - Masters

777. Delzell, Athol Hugh. Visual Teaching Aids for Industrial Arts Teachers.

778. LaBaun, George Bradford. An Analysis of Structural Details and Fabrication Procedures in Wood Frame Residential Construction for the Development of Appropriate Teaching Procedures.

#### 1961 - Masters

779. Callender, Mark L. The History and Present Position of the General Shop Movement in the State of Oregon.

780. Turbyne, John Walker. Dust Control for Industrial Arts Shops of Oregon Secondary Schools.

#### 1963 - Masters

781. Easley, Charles Richard. The Need for an Industrial Arts-Related Science Program for Oregon Secondary Schools and a Proposed Method to Fill This Need.

782. Kaiser, Ronald Earl. The Status of Industrial Arts in the Public Second-

ary Schools in Oregon.

783. Ruiter, William Wallace. The Correlation of Certain Background Factors with the Ability of High School Students to Profit from an Industrial Arts Program in Electronics.

#### 1964 - Masters

784. Love, Leonard Carl. A Study of a Metallurgical Background of Welding Instructors at the College or University Level.

- 785. Cook, Gregory Crawford. The Development of a British Columbia Achievement Test for Eighth Grade Industrial Arts.
- 786. Harder, Jacob. The Development of the Industrial Arts Program and Its Present Status in the Province of Alberta.

# INDUSTRIAL ENGINEERING

#### 1961 - Masters

- 787. Allen, William Peter. Statistical Determination of Safety Stocks and Lead Times for an Economic Order Quantity Electronic Data Processing Inventory Control System.
- 788. Hildebrandt, Louis Howard. Forecasting Demand in a Seasonal Industry.

#### 1962 - Masters

789. Withycombe, Richard Perry. The Use of Process Fraction Defective as a Basis for the Design of X Chart Sampling Procedures.

### 1963 - Masters

790. Swan, Robert Jay. Investment Decisions By the Use of Present and Simulated Mathematical Models.

#### 1964 - Masters

791. Inoue, Michael Shigeru. Critical Path Scheduling: Tableau Method.

### 1965 - Masters

- 792. Chamberlain, Howard Emil. Estimating Highlead Logging Performance Through Statistical Models.
- 793. Dervitsiotis, Kostas Nicolaus. Critical Path Budgeting: A Synthesis of Budgeting and Critical Path Scheduling.

### INORGANIC CHEMISTRY

# 1961 - Masters

- 794. Baker, Everett Duane. Preparation and Properties of Trifluoromethyl-Boranes.
- 795. Beasley, Thomas Miles. Isotopic Exchange Reactions of Hydrogen Sulfide in Nonaqueous Solutions.
- 796. Sapsoonthorn, Surang. Absorption Spectra of Thallous Complexes in Bromide Solutions.

#### 1962 - Masters

797. Shakashiro, Mouaffac. The Radiosulfur Exchange Reaction Between Hydrogen Sulfide and Elementary Sulfur in Chloroform Solutions Containing Triethylamine.

- 798: Gray, Walter James. Low Temperature Thermal Analysis of Some Boron Trihalide Complexes.
- 799. Stanclift, William Everett. Nuclear Magnetic Resonance Investigation

  Acidic Proton Behavior in Phenylsulfonylacetone and Acetohydroxamic Acid.

800. Schaad, Lewis Hyde. Synthesis of the Boron-Boron Bond.

 Wiggle, Ronald Rene. Isotopic Exchange Reactions in Sulfur Monochloride.

### 1960 - Doctors

802. Gruzensky, Paul Milnore. Electrical Conductivity and Ultraviolet Absorption Spectra of High-Purity Potassium Chloride Single Crystals.

#### 1961 - Doctors

803. Hatch, Conrad Valoi. Thermodynamic Characterization of Graphitic Oxide Surfaces.

#### 1964 - Doctors

804. Bain, Ralph Lee. Isotopic Exchange Reactions Between Thionyl Chloride and Sulfuryl Chloride.

805. Curtice, Russell Everett. The Luminescence of Thallium (I) Halide Complexes.

806. Stump, Arthur Darrell. The Microstructure of Marine Sediments.

#### 1965 - Doctors

- 807. Bairakdar, Hiyam. The High Temperature Radiosulfur Exchange Reaction of Sulfur Dioxide with Concentrated Sulfuric Acid and Ammonium Bisulfate.
- 808. Hansen, John Donald. Preparation and Lewis Acid Properties of Diboron Tetrafluoride and Related Compounds.
- 809. Self, James Maurice. Fluoroboranes. I. Preparation and Properties of Trifluoromethyldi-n-Butylborane.

### LOGGING ENGINEERING

SEE Forest Engineering

### **MATHEMATICS**

#### 1960 - Masters

- 810. Andrews, George Eyre. Lattice Points on the Boundary of Convex Bodies.
- 811. Damewood, Leroy Mitchell. Proofs of the a  $+\beta$  Theorem Based on Mann's Transformation.

- 812. Vinson, John Ellsworth. Modulo m Properties of the Fibonacci Sequence.
- 813. Braun, William Albert. Construction of the Real Numbers by Sequences.
- 814. Gamon, Kenneth Oakland. The Generation of Series with Higher Transcendental Functions by Means of Integral Transforms.
- 815. Jacobs, Michael Jay. A Proof of the Consistency of Geometry.
- 816. Marsh, Donald Dean. Mechanization of the Moore-Mealy Algorithm for the Reduction of Sequential Machines.
- 817. Witcraft, Don Allen. The Mechanization of Logic II.
- 818. Yang, Hwai Nien. The Parallel Axiom in N-Dimensional Hyperbolic Space.

- 819. Birdsall, Leslie Howard. Quaternions and Their History.
- 820. Borden, Susan Jane (Dobson). The Foundations of Trigonometry.
- 821. Chisum, Clayton Herbert. On the Cauchy-Davenport Inequality for the Sum of Subsets of a Cyclic Group.
- 822. Dixon, Oren Wesley. On the Simplification of Boolean Polynomials.
- 823. Engstrom-Heg, Verna Louise. Some Mathematical Models in Ecology.
- 824. Gabrielsen, Ralph Edwin. A Positive Harmonic Function in a Rectangle.
- 825. Guenther, Ronald Bernard. An Extension of Widder's Theorem.
- 826. Hanson, Richard Joseph. Long Range Regulation of a Hydroelectric System with Storage Dams.
- 827. Lim, Yeam Seng. An Inequality for the Number of Integers in the Sum of Two Sets of Integers.
- 828. Norman, Søren Frederick. Two Finite Tchebichef Transformations.
- 829. Prenter, Patricia Moira. A Recursive Definition of Ordinal Arithmetic.
- 830. Toms, Ralph Marvin. On Systems of Boolean Equations.
- 831. Unger, James Lenes. Rational Approximations for Functions of a Complex Variable Obtained by Use of the Darboux Formula.

#### 1963 - Masters

- 832. Applebee, Ralph Calvin. A Two Parameter Laplace's Method for Double Integrals.
- 833. Comstock, Dale Robert. Machine Algorithms for Boolean Matrices.
- 834. Harmer, Dale Leroy. A Mixed Variables-Attributes Double Sampling Plan.
- 835. Henderson, Mason Edward. Finite Non-Projective Geometrics Without the Axiom of Parallels.
- 836. Holroyd, John Ries. Algorithms for the Solution of Two Algebraic Equations in Two Unknowns.
- 837. Klosinski, Leonard Frank. The Enumeration of Strings of a Given Length in an N-ary Non-Associative Non-Commutative Algebra.
- 838. Lathrop, James Frank. Stability of Numerical Integration of Ordinary Differential Equations.
- 839. Lawrence, Harold G. A Generalized Procedure for Defining Quotient Spaces.
- 840. Prothero, Stephen Kerron. On the Enumeration of Certain Equivalence Classes of Euler Paths of Full Graphs.
- 841. Tjoelker, Cornelius Henry. On the Structure of Minimum Surfaces at the Boundary.

- 842. Anderson, Sandra Elaine. Some Computational Schemes Equivalent to Turing Machines.
- 843. Arthur, Samuel Codjoe. On the Generalization and Application of the Euler MacLaurin Formula.
- 844. Butler, Karen Jensen. An Algorithm for Determining the Convex Hull of N Points in 3-Space.
- 845. Choban, Paul James. An Introduction to Scators.
- 846. Golden, Robert Ray. The Solutions of Certain Equations in a Variable and Its Greatest Integer Part.
- 847. Johnson, Bruce Rae. An Application and Generating Methods for Mellin Transforms.

848. Matzdorff, Edward Max. Coalescent Singular Points of Differential Systems Having Quadratic Right Hand Sides.

849. Weingarten, Fred Wesley, Jr. On an Integral Equation Occurring in the Theory of Wave Propagation.

### 1965 - Masters

850. Biegun, Barry Dow. Equivalence Relations on Matrices.
851. Boles, John Amos. Computer Simulation of College Administration.
852. Chow, Chi-Ming. The Property of Completeness of Geometry.

853. Chow, Theresa Kee Yu. On the Cantor Set.

- 854. Driessel, Kenneth Richard. Circuit Algebras and Some of Their Prop-
- 855. Frederick, Darcy Frank. Recursive Fixed-Memory Smoothing of Accelerated Motion.
- 856. Hill, Richard David. Generalizations of the Ostrowski-Schneider Main Inertia Theorem.
- 857. James, Ralph Leland. The Solution of Singular Volterra Integral Equations by Successive Approximations.
- 858. Keizur, James Jay. Constructive Methods for Finding a Root of Certain Algebraic Equations with Real Coefficients.
- 859. Lindstrom, Frederick Thomas. On the Solution of the Non-Linear Differential Equations for a Biochemical Enzyme System.
- 860. Murray, Peter John. The Greatest Integer Part Function.
- 861. Ogard, Steven Phillip. Vector Sums of Line Segments.
- 862. Reed, Wallace Henry. Least Squares Solutions for Non-Orthogonal Two-Way Classifications.
- 863. Rogers, James Vincent. A Study of the Resection Problem in Surveying.
- 864. Schafer, Paul Lyle. An Algorithm for the Determination of the Eliminant of Three Algebraic Equations in Three Unknowns.
- 865. Van Dyke, James Allen. A Proof of the Consistency of Projective Geometry.

#### 1960 - Doctors

- 866. Amos, Donald Edward. Application of the Wiener-Hopf Technique to Half Plane Diffraction of Cylindrical Waves.
- 867. McFarland, James Edward. Iterative Solution of Nonlinear Integral Equations.

#### 1961 - Doctors

868. Rosenthal, Paul Lester. On a Generalization of Mehler's Inversion Formula and Some of Its Applications.

#### 1962 - Doctors

- 869. Goebel, Jack Bruce. On the Algebra of Orthogonal Latin Squares.
- 870. Kvarda, Betty Lou. Inequalities for the Number of Integers in a Sum of Sets of Gaussian Integers.
- 871. Maloof, Giles Wilson. Differential Changes in the Zeros of Polynomial Operators.
- 872. Wheelock, James Dickinson. An Approximate Solution to the Problem of Random Flights in a Euclidean Space of N Dimensions.

- 873. Kohfeld, John Jacob. Stability of Numerical Solutions of Systems of Ordinary Differential Equations.
- 874. Olive, Gloria. Generalized Powers.
- 875. Roetman, Ernest Levane. Vibration of Elastic Bars.
- 876. Soni, Raj Pal. The Diffraction of Cylindrical Waves by Two Parallel Half Planes.
- 877. Tucker, Richard Ray. Error Analysis, Convergence, Divergence, and the Acceleration of Convergence.
- 878. Wirshup, Arthur D. Application of the Puiseux Polygon to the Solution of Nonlinear Integral Equations.

### 1964 - Doctors

- 879. Henderson, Mason Edward. Finite Geometries Without the Axiom of Parallels.
- 880. Johnson, Ben Clarence. Integral Equations Involving Special Functions.
- 881. Krogh, Frederick Thomas. Stability and Accuracy of Predict-Correct Methods in Differential Equations.
- 882. Soni, Kusum Lata. On Some Relations Which Are Equivalent to Functional Equations of the Type of Riemann's Zeta Function and Tables of Divisor Transforms.
- 883. Wyse, Frank Oliver. Nets in Uniform Spaces: Monotoneity, Limit Theorems.

#### 1965 - Doctors

- 884. Balogh, Charles Béla. Asymptotic Expansions and General Behavior of the Modified Bessel Function of the Third Kind of Imaginary Order.
- 885. Balogh, Maria Edith Csermelyi. On Scheduling Algorithms.
- 886. Brady, Allen Harold. Solutions of Restricted Cases of the Halting Problem Applied to the Determination of Particular Values of a Non-Computable Function.
- 887. Freedman, Allen Roy. A General Theory of Density in Additive Number Theory.
- 888. Reudink, Douglas Otto John. An Extension of the Method of Haar for Determining the Asymptotic Behavior of Integrals of the Inverse Laplace Transform Type.
- 889. Unger, Izaak Leo. Elements of a Fast Decimal Arithmetic Unit.

# MECHANICAL ENGINEERING

- 890. Bonsu, Osei Kwabena. Forming Dimensionless Products by Using an Algorithm Developed from Matrix Theory.
- 891. Chiou, Jiunn Perng. Study of Static Performance of a Turbojet Engine.
- 892. Gorski, Saul Bohdan. An Analytic Approach to Temperature Distribution in a Thin-Walled Combustion Chamber.
- 893. Henry, Calvin Scott. The Development of the Characteristic Grid for Supersonic Diverging Jets Exhausting Into a Hypersonic Parallel Flowing Stream.
- 894. Mullen, Charles Robert, Jr. The Effects of Creep on the Structure and Mechanical Properties of Zirconium.

895. Riesland, Edward Ernest. The Effects of Stress and Temperature on the Creep of Aluminum Alloy Conductor Wire.

896. Vincent, Thomas Lange. Artificial Satellite Life Duration in Near-Earth

Orbits.

897. Waterhouse, Alvin Sidney. Some Factors Affecting the Heat Transfer in a Finned Tube Radiator Using Low Pressure Steam and Hot Water as a Heat Source.

898. Wong, Jackson. 'The Structure and Physical Properties of Creep-Tested

Aluminum Conductor Wire.

899. Yu, Chia-Ping. The Effect of Excess Air on Furnace Wall Temperature and Heat Transfer for Natural Gas Combustion in a Tubular Heat Exchanger.

### 1961 - Masters

900. Bailey, Wendell Jack. Investigation of Plutonium-Bearing Fuel Elements for the Plutonium Recycle Test Reactor (PRTR).

901. Fullman, Carl Harvey. The Design of a Mechanism for Tensile Testing in a Liquid Helium Dewar.

### 1962 - Masters

902. Bithell, Robin Allan. The Design and Construction of a Small Intermittent Supersonic Wind Tunnel.

903. Boehme, Martin Leon. The Use of a Stirling Hot-Air Engine in Con-

verting Solar Energy to Mechanical Power.

904. Hull, Gordon Laurance. The Design of a Variable Strain Rate, Autographic Recording, Tensile Testing Machine.

905. Johnson, Douglas Edward. A Rapid Method for Determinations of

Nitrogen Oxides in Engine Exhaust Gas.

906. Moustafa, Mahmoud Adb-Elfattah. Undamped Oscillations of Air Springs.

907. Pearl, John Joseph. Development and Design of Veneer Scarfing Machinery.

908. Postlewaite, John Edwin. Production of Uniform Condensation from Saturated Air Flow in Cooled Porous Media.

909. Thompson, Ralph Allen. A Thermodynamic Study of Energy Absorbed by a Motored Four Cycle Engine with Positive Exhaust Pressure as Applied to Commercial Exhaust Brakes.

910. Van Kleeck, Nelson Leeds. A Design of a Furnace for Melting Re-

fractory Metals Using a Plasma Jet Heat Source.

- 911. Benedetti, Gerald Andrew. Pure Torsion of a Slotted Channel Member.
- 912. Chiang, Chung. A Quantitative Study of Recirculation in Cooling Towers.
- 913. Corsiglia, Victor Robert. A Calculation of the Suction Requirements to Prevent Boundary Layer Separation on a Circular Cylinder.
- 914. Dennon, Jack Dwight. Boundary Layer Control Tests by Suction on a Circular Cylinder Wing Section.
- 915. Gifford, Raymond Warren. Structural Factors Affecting Wear of Cobalt Base Hard Facing Alloys.
- 916. Mackie, Keith Leroy. The Conversion of Solar Radiation to Heat Energy Using a Trough-Type Parabolic Mirror.

- Paige, Rudolph Stanley. Effects of Gamma Radiation on Selected Single Crystals.
- 918. Shen, Chung-Yi. The Distribution of Moisture Condensed from Saturated Air Flowing Through Cooled Porous Media.
- 919. Swanson, Vernon Hugo. The Effect of Oscillation and Gas Content on Free Convection from Horizontal Cylinders in Water.
- 920. Wilson, Laurence Martin. Laboratory Creep Studies on "Pheasant" and "Expanded" Aluminum Conductors.

- 921. Elliott, Leonard Thomas. Catastropic Propagation of Ductile Cracks in Metallic Foils.
- 922. Kato, Howard Tsuneyuki. Correlation of Steam-To-Air and Hot Water-To-Air Heat Transfer Rates for a Finned Tube Heat Exchanger.
- 923. Mitchell, Jack Alan. Control of Peak Stresses in Tensile Testing Machine Components Subjected to Shock Loading.
- 924. Shen, Yuan-Shou. Creep Studies on "Expanded," "Chukar," and "Drake" Aluminum Conductors.
- 925. Trent, Donald Stephen. The Control of Moisture Condensed from Saturated Air Flowing Through Cooled Porous Media.
- 926. Watson, William Paul. Fatigue of the Alloy Columbium (Niobium)-One Percent Zirconium.

- 927. Addicott, Donald James. Partial Recirculation of Diesel Engine Exhaust for the Reduction of Oxides of Nitrogen.
- 928. Graves, Donald Larry. Effect of Vibration on Forced Convection to Water from a Cylinder at Reynolds Numbers in the Range of Stable Vortex Shedding.
- 929. Guthrie, James Leonard. An Investigation of Precipitation from Solid Solution in an Aluminum-Magnesium-Silicon Alloy Using X-Ray Diffraction Techniques.
- 930. Jaros, Gary Dean. The Fate of Oxides of Nitrogen Through a Direct Flame Afterburner in the Exhaust of a Gasoline Engine. (Joint thesis with Neill Richard Parkin.)
- 931. Johnson, Phillip Merle. Development of a Laser Interferometric Dilatometer.
- 932. Martin, Timothy William. The Local Natural Convection Heat Transfer Coefficient on a Heated Horizontal Cylinder Oscillating in Water.
- 933. O'Kins, Charles Eugene. The Development of Analytic Techniques and FORTRAN Programs for the Evaluation of Plane Motion Mechanisms.
- 934. Parkin, Neill Richard. The Fate of Oxides of Nitrogen Through a Direct Flame Afterburner in the Exhaust of a Gasoline Engine. (Joint thesis with Gary Dean Jaros.)
- 935. Robinson, Ernest Yehezkel. Some Theoretical and Experimental Aspects of Design with Brittle Material.
- 936. Sandberg, Gary Karl. An Analysis of Automobile Handling Characteristics and Stability.
- Sevilla, Ronaldo Antonio. A Numerical Solution to the Dynamic Response of a Simply Supported Beam Under a Moving Mass Load.

938. Claudson, Thomas Tucker. Purification of Zirconium by Solid State Electrolysis and Zone Refining.

### 1963 - Doctors

939. Riggs, James Lear. Influence of Environmental Factors on Human Mental and Motor Performance in Console Operations.

#### 1964 - Doctors

940. Wilson, Robert Elliot. Stagnation Point Heat Transfer in a Relaxing Gas.

### 1965 - Doctors

- 941. Moustafa, Mahmoud Abd-Elfattah. Normal Modes in Nonlinear Nonsymmetrical Systems with Two Degrees of Freedom, and Applications to Air Springs.
- 942. VanSant, James Hurley, Jr. Convection Heat Transfer in Separated Regions-Subsonic Diffusers.

# METALLURGICAL ENGINEERING

SEE Chemical Engineering

### **METALLURGY**

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### METEOROLOGY

#### 1961 - Masters

943. Mendenhall, Laurence David. Variability of Precipitation in Western Oregon as Revealed by Radar Echo Patterns.

#### 1962 - Masters

- 944. Ramsdell, James Vanner, Jr. A Study of Air Pollution Potentiality in the Willamette Valley.
- 945. Steigner, John Martin. Variations from Pulse to Pulse in Weather Radar Return Signals.

- 946. Couch, Richard William. Surface Observations of the Electrical Charges Retained by Precipitation.
- 947. Fosberg, Michael Allen. A Synoptic and Radar Study of Post-Cold-Frontal Squall Lines.
- 948. Sarmah, Suryya Kanta. A Radar and Synoptic Study of Rain at a Point.
- 949. Sears, James Walter. A Study of Radar Precipitation Echo as Influenced by Marys Peak.
- 950. Snelling, Hilda Jane. Production Efficiency of Different Silver Iodide Ice-Forming Nuclei Generators.
- 951. Starr, Leonard Neal. Efficiency of Methods of Producing Ice Crystals in Supercooled Clouds.

952. Knechtel, Kenneth Boyd. A Study of Radar Echo Patterns Related to Mesoscale Network Observations and Topography.

953. Pembrook, John David. Obtaining Optimum Photographic Recording of

Data from Weather Radar Presentations.

954. Takeuchi, Donald Masaru. A Study of Some Observed Variations in Radar Z-R Relationships Within Storms.

# 1965 - Masters

955. Adotevi-Akue, George Modesto. Evaluation of Alternative Markovian Models for Precipitation Occurrence in Oregon.

956. Ayer, Harold Stevens. The Response of Mountain and Valley Winds to Changes of Synoptic Weather Type in an Area of Complex Topography.

### 1962 - Doctors

957. Lowry, William Prescott. The Sea Breeze of Northwest Oregon and Its Influence on Forestry Operations.

# MICROBIOLOGY AND HYGIENE

#### 1960 - Masters

- 958. Bhatt, Rajanikant Premshanker. Effect of Gibrel on Azotobacter chroococcum.
- 959. Evenson, Vera Helen. Preparation, Purification, and Recovery of Streptomyces griseus Phage.
- 960. Wu, William Gay. The Morphology of Anaplasma marginale and the Respiratory Activity of Anaplasma-Infected Blood.

### 1961 - Masters

- 961. Cavenee, William Lee. The Combined Effects of Heat and Irradiation on the Survival of the Spores of Clostridium botulinum, Type A5, in Raw Ground Beef.
- 962. Corlett, Donald Alexander, Jr. The Combined Effect of Additives and Irradiation on the Survival of Clostridium botulinum.
- 963. Gawel, Len Joseph. The Role of Rhizosphere Bacteria in the Growth of Tall Fescue.
- 964. McCarthy, Charlotte Marie. Changes in Soil Respiration Patterns Induced by Altering Carbon-to-Nitrogen Ratio with Nitrate Nitrogen,

- 965. Allen, Lois Kendron. Studies on Transduction in Lactic Streptococcus Organisms.
- 966. Brown, Willie Claiborne. Studies on Transformation in Streptococci.
- 967. Knittel, Martin Dean. The Intracellular Development of Fowl Laryngotracheitis Virus.
- 968. Lee, Jong Sun. Spectrophotometric Characterization of the Carotenoid Pigments Isolated from *Micrococcus radiodurans*.
- 969. Pigg, Carrie Joanne. Enzymatic Studies on Some Methionine Auxotrophs of Yeast.
- 970. Saunders, Grady Franklin. Studies on the Fatty Acid Composition of Yeast.

- 971. Saunders, Priscilla Prince. Terminal Reactions in Tryptophan Biosynthesis in Yeast.
- 972. Sing, Edmond Lee. Bacteriophage Destruction by Aerosols of Dichloroisocyanuric Acid and Other Germicides.
- 973. Spence, Kemet Dean. A Genetic and Biochemical Analysis of Selected Yeast Methionine Auxotrophs.
- 974. Starr, Patricia Rae. Studies on Sterol Synthesis in Yeast.
- 975. Turner, Nikki Edwards. Enzymatic Analysis of Mutant and Wild Type Lactic Streptococcus Organisms Developing on a Selective Medium.

- 976. Auborn, Karen Roberts. Lysogeny in Bacillus subtilis.
- 977. Bradford, Erlene Bernadette. Electron Microscopy of Phage Infected Streptomyces griseus Cells.
- 978. Neal, John Lloyd, Jr. Influence of Slash Burning on Microbial Population and Activities in a Douglas-Fir Forest Soil.
- 979. Purkerson, Lorus Lee. Persulfate Oxidizable Carbon as an Index of Organic Pollution in Wastewater.
- 980. Turner, Jan Ross. Biosynthesis of Yeast Sterols.

### 1964 - Masters

- 981. Dutiyabodhi, Pisawat. The Irradiation Resistance of Food Pathogens Contaminating Seafoods.
- 982. Gwinn, Darrel Dean. Studies on Transformation of Bacillus licheniformis.
- 983. Hobbs, Joe Nelson, Jr. Inhibition of the Development of Lee Influenza Virus by Puromycin.
- 984. McGregor, Sandy. A Quantitative Comparison of the Incorporation of C<sup>14</sup> Labeled Lipids and Lipid Precursors Into Lee Influenza Virus.
- 985. Mathemeier, Paul Fredrick. Temperature and Hydrostatic Pressure Effects on the Activity of a Thermophilic Inorganic Pyrophosphatase.

#### 1965 - Masters

- 986. Amend, Donald Ford. Comparison of Certain Sulfonamide Drugs for Treatment of Bacterial Infections of Pacific Salmon.
- 987. Dyer, John Kaye. Gamma Irradiation Patterns of Salmonella typhosa, Salmonella paratyphi B, and Salmonella wichita in Crabmeat.
- 988. Keng, Jiun Guang. Isolation of Auxotrophic Mutants of *Bacillus cereus*, 989. Langridge, Patricia. Studies on Partially Purified Malic Dehydrogenase
- 989. Langridge, Patricia. Studies on Partially Purified Malic Dehydrogenase from the Marine Psychrophile, *Vibrio marinus*.
- 990. Lewis, Norman Francis. Studies on the Lipid and Fatty Acid Composition of *Micrococcus radiodurans*.
- 991. Robison, Sarah May. Studies on the Effect of Moderate Temperature on Vibrio marinus.
- 992. Wagner, Sally Ann. Studies on Mutation and Lactose Fermentation in Lactic Streptococci.
- 993. Wang, Wei-Sheng. Factors Related to Resistance of Bacteria to Quaternary Ammonium Germicides.

### 1960 - Doctors

994. Zimmerman, Robert Arnold. A Comparative Serological Investigation of Hemolytic Streptococcal Infections Within Institutionalized and Non-Institutionalized Groups.

- 995. Bowen, James Milton. The Inhibitory Effect of Certain Combinations of Antimetabolites and Other Compounds on the Development of Influenza Virus.
- 996. Duggan, Dennis Edward. Physiological Studies on Radiation-Resistant Bacteria Occurring in Food.
- Roa, Pedro Dante. Biochemical and Physical Factors Influencing Microbial Denitrification Reactions.

### 1962 - Doctors

998. Seitz, Eugene Walter. Studies on Diacetyl Production by Streptococcus diacetilactis Matuszewski et al.

#### 1963 - Doctors

- 999. Kilbourn, Joan Priscilla Payne. Use of a Radiation Resistant Organism as a Protectant from Lethal Effects of Irradiation in Mice.
- 1000. Lee, Jong Sun. Investigation of Factors Influencing Radiation Resistance of Micrococcus radiodurans.

### 1964 - Doctors

- 1001. Bhatt, Rajanikant Premshanker. The Comparative Role of Molecular and Nitrate-Oxygen in the Dissimilation of Glucose.
- 1002. Buckley, Patricia Myers. Incorporation of Carbon-14 Into Lee Influenza Virus, Using Labeled Metabolites in a Tissue Culture System.
- 1003. Burton, Sheril Dale. Growth Characteristics and Metabolism of Beggiatoa.
- 1004. Deeney, Anne O'Connell. The Role of Methionine in the Metabolism of Micrococcus radiodurans.
- 1005. Fryer, John Louis. Methods for the In Vitro Cultivation of Cells from the Tissues of Salmonid Fishes.
- 1006. Kerwar, Suresh Shivarau. Amino Acid Metabolism in Acetobacter suboxydans.

#### 1965 - Doctors

- 1007. Chen, Chi-Sin. Influence of Interplanted and Pure Stands of Red Alder (Alnus rubra Bong.) on Microbial and Chemical Characteristics of a Coastal Forest Soil in the Douglas-Fir Region.
- 1008. Citti, James Edward. Control of Acid Production and B-Galactosidase Synthesis in Lactic Streptococci.
- 1009. Elliott, Lloyd Floren. Phosphorus Metabolism in Pseudomonas stutzeri.
- 1010. Knittel, Martin Dean. Genetic Homology and Exchange in Lactic Acid Streptococci.
- 1011. Krabbenhoft, Kenneth Louis. Significance of Pigments in Radiation Resistance of *Micrococcus radiodurans*.
- 1012. Mayeux, Jerry Vincent. Comparative Study of Aerobic and Nitrate Respiration in *Pseudomonas stutzeri*.
- 1013. Pigg, Carrie Joanne. The Terminal Reactions in the Biosynthesis of Methionine in Saccharomyces cerevisiae.
- 1014. Sorsoli, Wayne Aldo. The Cysteine to Homocysteine Conversion in Saccharomyces cerevisiae.
- 1015. Spence, Kemet Dean. Regulation of the Terminal Reactions for Methionine Biosynthesis in Yeast.

1016. Turner, Jan Ross. The Role of S-Adenosylmethionine in the Biosynthesis of Ergosterol and Related Sterols in Saccharomyces cerevisiae.

1017. Vedamuthu, Ebenezer Rajkumar. Production of Carbonyl Compounds by Lactic Streptococci: Relation to Cheddar Cheese Flavor.

1018. Wullstein, Leroy Hugh. The Non-Enzymatic Formation of Nitric Oxide from Soil and Clay Systems.

# MINING ENGINEERING

SEE Civil Engineering

# NATURAL HISTORY

SEE Zoology

### NATURAL RESOURCES

#### 1960 - Masters

- 1019. Bjerre, Arne Gudmund. The Geography of Agricultural Land Resource Use in Denmark.
- 1020. Jack, James Thomas. Agricultural Geography of the Klamath Basin in Oregon.
- 1021. Kuckreja, Virindar Singh. The Resources Base of the Punjab, India. 1022. Velthoen, John Richard. Some Characteristics of Time and Space Patterns of Fall Precipitation in Northwest Oregon.
- 1023. Wyatt, Neal Andre. The Resource Base of Jackson County, Oregon.

#### 1961 - Masters

- 1024. Hammond, Kenneth Allen. Resources and Development of Columbia County, Oregon.
- 1025. Nelson, Charles Edward. Deep Well Irrigation in Hamilton County, Nebraska: Resource, Development, Impact, and Future.
- 1026. Smith, Floyd Harold, Jr. Intensity and Periodicity of Spring Precipitation in the Willamette Valley.
- 1027. Stumbaugh, Thomas Ralph. Resource Development of North Lincoln County, Oregon.

#### 1962 **– M**asters

- 1028. Brown, Robert Charles. The Agricultural Geography of Peppermint in the Pacific Northwest.
- 1029. Eichhorn, Noel David. A Study of the Probability and Distribution of the Last Occurrence in Spring and First Occurrence in Fall of Certain Low Temperatures for Selected Oregon Stations.
- 1030. Laythe, Charles Winfield. The Dynamics of the Soviet Coal Industry: A Geographic Interpretation.
- 1031. Young, Gerald Loren. The South Umpqua Ranger District: A Case Study in Multiple Use.

- 1032. Carolan, William Bartholomew, Jr. The Federal Land in Oregon.
- 1033. Chiang, Tao-Chang. A Geographical Appraisal of the Taiwan Tea Industry.

- 1034. Goodman, Duane William. The Agricultural Geography of the Pear Industry in Jackson County, Oregon.
- 1035. McIntyre, Terry Vincent. The Riddle Nickel Enterprise—A Study of Resource Geography.

- 1036. Boyle, Richard Francis. The Present and Future Role of Industrial Forest Land of Oregon in Outdoor Recreation.
- 1037. Hall, James Edward. Geography of the Land Use in Okanogan County (Washington).
- 1038. Hiatt, James LeRoy. Diamond Lake and Upper Rogue River Recreation Survey, 1961.
- 1039. Hunt, Jack Horace. The Warner Valley Stock Company; a Geographic Study.
- 1040. Newland, Dale Cecil. Heat Unit Accumulation in Degree-Hours Above Selected Temperature Levels in Oregon.
- 1041. Tonack, Wayne Eugene. The Localization of the United States Sugar Beet Seed Industry with Emphasis on the Willamette Valley.

#### 1965 - Masters

- 1042. Albrecht, James Conrad. The Recreation Resources of the Malheur National Wildlife Refuge.
- 1043. Detering, Floyd John. The Geography of the Apple Industry of the Chelan Valley, Washington.
- 1044. Francis, Karl Earvil. Geographic Factors as Retardants to the Development of Alaska's Mineral Industries.
- 1045. Schmidt, Robert Howard, Jr. The Impact of Limited-Access Highways on Agricultural Land: National Interstate Route 5, Linn County, Oregon, a Case Study.
- 1046. Vedanayagam, Edith Gnanam. The Periyar-Vaigai Project (India)—A Geographical Appraisal of a Water Resource Development.
- 1047. Wales, Robert Ware. The Corvallis, Oregon, Rural-Urban Fringe: Conceptualization, Delineation, and Land Use.

# NEMATOLOGY

#### 1965 - Masters

1048. Buangsuwon, Dara Kanhasuwon. A Taxonomic Study of Mononchidae (Enoplida: Nemata) Inhabiting Cultivated Areas of Thailand.

### 1964 - Doctors

1049. Nigh, Edward Leroy, Jr. The Influence of Host Nutrition on the Development of Xiphinema americanum.

# NUCLEAR ENGINEERING

SEE Chemical Engineering

# NUTRITION

SEE Foods and Nutrition

# **OCEANOGRAPHY**

#### 1963 - Masters

1050. Denner, Warren Wilson. Sea Water Temperature and Salinity Characteristics Observed at Oregon Coast Stations in 1961.

1051. Lane, Robert Kenneth. A Model of Seawater Structure Near the West Coast of Vancouver Island, British Columbia.

1052. Maughan, Paul McAlpine. Observations and Analysis of Ocean Currents Above 250 Meters off the Oregon Coast.

1053. Rosenberg, Donald Hudson. Characteristics and Distribution of Water Masses off the Oregon Coast.

#### 1964 - Masters

1054. Blanton, Jackson Orin. Energy Dissipation in a Tidal Estuary.

1055. Bushnell, David Clifford. Continental Shelf Sediments in the Vicinity of Newport, Oregon.

1056. Collins, Curtis Allan. Structure and Kinematics of the Permanent Oceanic Front off the Oregon Coast.

1057. Cross, Ford A. Seasonal and Geographical Distribution of Pelagic Copepods in Oregon Coastal Waters.

1058. Davey, Earl Walter. The Enzymatic Measurement of Primary Production.

1059. Matson, Adrian Luther. Dissolved Silicate in Waters Offshore Oregon and in Four Adjacent Rivers.

1060. North, William Benjamin. Coastal Landslides in Northern Oregon.

1061. Rinehart, Verill Joanne. Investigation of Twelve Earthquakes off the Oregon and Northern California Coasts.

1062. Russell, Howard Jamison, Jr. The Endemic Zooplankton Population as a Food Supply for Young Herring in Yaquina Bay.

1063. Tont, Sargun Ali. The Bone Structure of Some Marine Vertebrates.

#### 1965 - Masters

1064. Karinen, John Franklin. Succinic Dehydrogenase Activity in Mesopelagic Oceanic Fishes.

1065. Laun, Philip Royal. Primary Seismic Wave (P) at 250-350 km Compared to Measured Wave at 0.3 km from GNOME Nuclear Explosion.

1066. McCormick, Jon Michael. Some Aspects of Marine Hydroid Ecology off Oregon.

1067. Minard, David Raymond. Solar Radiation Measured at the Sea Surface off Oregon During Summer 1963.

1068. Schatz, Clifford Eugene. Source and Characteristics of the Tsunami Observed Along the Coast of the Pacific Northwest on March 28, 1964.

1069. Skov, Niels Aage. Factors Influencing the Salinity Difference Between the North Atlantic and North Pacific Oceans.

1070. Swanson, Robert Lawrence. Tidal Prediction, and the Variation of the Observed Tide from the Predicted Tide at Newport, Oregon.

1071. Trembly, Lynn Dale. Primary Seismic Waves Near Explosions.

1072. Whitcomb, James Hall. Marine Geophysical Studies Offshore—Newport, Oregon.

## 1962 - Doctors

1073. McAlister, William Bruce. The General Circulation in the North Pacific Ocean Referred to a Variable Reference Surface.

1074. Osterberg, Charles Lamar. Radioactivity in Oceanic Organisms.

#### 1964 - Doctors

1075. Smith, Robert Lloyd. An Investigation of Upwelling Along the Oregon Coast.

#### 1965 - Doctors

- 1076. Kulm, LaVerne Duane. Sediments of Yaquina Bay, Oregon.
- 1077. Lane, Robert Kenneth. Climate and Heat Exchange in the Oceanic Region Adjacent to Oregon.
- 1078. Maloney, Neil Joseph. Geology of the Continental Terrace off the Central Coast of Oregon.
- 1079. Neal, Victor Thomas. A Calculation of Flushing Times and Pollution Distribution for the Columbia River Estuary.

### ORGANIC CHEMISTRY

#### 1960 - Masters

- 1080. Ikeda, George Joji. The Biosynthesis of Certain Amino Acids in Pseudomonas fluorescens KB1.
- 1081. Klein, George William. The Mechanism of the Hofmann-Martius Rearrangement of N-Alkylaniline.
- 1082. Wischmann, Kenneth Brandt. Addition Reactions of the Condensate of Picolylithium and Certain Unsaturated Aldehydes.

#### 1961 - Masters

- 1083. Huff, Richard Royce. The Rearrangement of the Side Chain of N-Propylbenzene Under Electrophilic Substitution Conditions.
- 1084. Lasater, Neil Jonathan. Structures of Certain Chloro Substituted Pyrimidines.
- 1085. McMahill, Paul Edward. Synthesis of 2-Substituted 5, 8-Dihydroxy-pyrimido (4,5-d) Pyridazines.
- 1086. Maruyama, Shigeki. The Dethionation of Certain 2-Substituted Purines and Pyrimidines.
- 1087. Pippin, Wallace Harold. Valence Tautomerism in Cis-1, 2-Di-1<sup>1</sup>-Cyclohexen-1<sup>1</sup>-Ylethylene.
- 1088. Wiman, Robert Edgar. An Investigation of the Reaction of Benzil with Triphenylphosphorusmethylene.

- 1089. Arthachinta, Sukanda. Reactions of the Condensates of Picolyllithium and Acrolein.
- 1090. Davis, Clyde Edward. Reactions of 2-Hydroxy-3-Bromo-1, 2, 3, 4-Tetra-hydroquinolizinium Bromide.
- 1091. Greendorfer, Joseph Marvin. The Reaction of Phosphorus Oxychloride with Certain Hydroxylated Nitrogen Heterocycles in the Presence of Tertiary Aromatic Amines.
- 1092. Nash, Boyd D. Reactions of the Condensates of Picolyllithium and Acrolein and Methacrolein.

1093. Churchley, Philip Leslie. Preparation and Semihydrogenation of Some a, β-Acetylenic Ketones.

1094. Lilienthal, Ronald Roy. The Synthesis of Certain N-(6-Purinyl) Substituted Amino Acid Esters.

1095. Masumoto, Herbert T. Reactions of the Condensate of 2-Pyridine-aldehyde.

1096. Nelson, Denny Bernie. The Decomposition of Aralkyl Sulfites.

1097. Strebin, Robert Samuel, Jr. The Chlorination of Uric Acid with Phosphorus Oxychloride in the Presence of Certain Nitrogeneous Bases.

#### 1964 - Masters

1098. Bartsch, Richard Allen. The Thermal Decomposition of Aralkyl Thiocarbonates.

1099. Bray, Gary Ronald. The Reactions of P-Toluenesulfinic Acid with Mercaptans and Secondary Alkyl Sulfides.

1100. Leutzinger, Eldon Edward. An Investigation of the Reduction Products of 4-Amino-2, 6-Dichloropyrimidine by Catalytic Hydrogenation.

1101. Provant, Stephen Glenn. The Synthesis and Spectral Properties of 2,4-Dioxabicyclo [3.3.1] Nonanes.

1102. Wall, Robert Gene. Synthesis of Some Bicyclo (6.1.0) - Nonane Derivatives.

#### 1965 - Masters

1103. Bradway, Diane Elizabeth. Decomposition of Di-P-Toluenesulfonyl-hydrazones.

1104. Damewood, John Roderick. Steroid-Dihalocarbene Reactions.

1105. Fujiwara, Allan. A Method for the Isolation of Canavanine by Ion Exchange.

1106. Haase, William Alan. The Chlorination of Uric Acid by Phosphorus Oxychloride in the Presence of Certain Aliphatic and Aromatic Amine Hydrochlorides.

1107. Nazeeri, Makeen Ahsan. An Investigation of the Necleophilic Substitution of the Chlorosubstituted Pyrimidines.

1108. Whitman, James Edgar. Reactions of I-(α-Pyridyl)-3-Buten-1-ol.

#### 1960 - Doctors

1109. Doyle, William Patrick. The Evaluation of the Function of Pathways in Tomato Metabolism.

1110. Imel, Arthur Madison. A Study of the Acid-Catalyzed Rearrangement of 4-Oxo-e, 3-Dimethyl-3, 4-Dihydrophenanthrene.

1111. Stephenson, John Louis. Some Stereochemical Aspects of the Claisen Rearrangement.

#### 1961 - Doctors

1112. Jones, Dallas Eugene. The Catabolism of Gluconate in Escherichia coli.

1113. Laursen, Paul Herbert. The Synthesis of 2, 4, 7-Trichloroimidazo (4, 5-d)-Pyridazine and Several of Its Derivatives.

1114. Nitidandhaprabhas, Ovart. Syntheses of Some 1:8 Naphthyridines.

#### 1962 - Doctors

1115. Aft, Harvey. The Nuclear Reduction of Certain Pyrimidines with Palladized Charcoal.

- 1116. Anderson, Daniel Richard. A Study of the Mechanism of the Abnormal Claisen Rearrangement.
- 1117. Krackov, Mark Harry. The Cyclization Reactions of Certain 5-Amino-4-Chloro-6-Hydrazinopyrimidines with Phosgene.
- 1118. Richardson, Bruce Coburn. A Reinvestigation of the Claisen Rearrangement of Allyl o-Tolyl Ether.
- 1119. Wiman, Robert Edgar. Isolation and Identification of Certain Toxic Compounds in a Fraction of Kraft Mill Waste.

1120. Ong, Josephine. Some Studies Relating to Stereochemistry of the Claisen Rearrangement of Cis- and Trans-a, \( \gamma\)-Dimethylallyl Phenyl Ethers.

### 1964 - Doctors

- 1121. Morkved, Eva Henmo. Mechanisms of Reactions of Sulfinic Acid. I. The Sulfide-Sulfinic Acid Reaction. II. The Disulfide-Sulfinic Acid Reaction.
- 1122. Rowell, Charles Frederick. Preparation of Propylcyclohexanes with Functions on the 4 and 3' Positions.

# 1965 - Doctors

- 1123. Engebrecht, Ronald Henry. Mechanisms of Internal Substitution Reactions.
- 1124. Tashiro, John Toshiyuki. Semihydrogenation in Conjugated Systems and Its Application in the Synthesis of Trienes.

# **PALEONTOLOGY**

SEE Geology

### PHARMACY

### 1960 - Masters

- 1125. Burton, Stephen Dale. Gibberellin Effects on the Carbohydrate, Glycoside, and Growth Patterns in *Digitalis lanata* Ehrhart.
- 1126. Brummett, Robert Eddie. The Influence of Gibberellic Acid on the Growth and Nitrogen-Fraction Patterns in Datura stramonium Linne.

### 1961 - Masters

- 1127. Benslay, Don Nolan. Cardiovascular Effect of Trimethobenzamide.
- 1128. Billups, Norman Fredrick. Correlation of Water Absorption with Tablet Disintegration Time.

#### 1962 - Masters

- 1129. Holland, Edward Lee. A Comparison of the Antiarrhythmic Activities of Amodiaquine, Primaquine, and Quinidine.
- 1130. Patel, Jyotindra Babubhai. Factors Affecting Average Weight and Weight Variation of Compressed Tablets.

#### 1963 - Masters

1131. Bennett, James Herbert. The Effect of Various "Growth Retardants" on the Growth and Metabolic Products of Datura meteloides D. C.

1132. Fakouhi, Taghi. A Study of Powdered Corncob as a Disintegrating Agent in Compressed Tablets.

1133. Harrison, Charles R. Financial Management in Selected Oregon Pharmacies.

1134. Lei, Benjamin Wing. The Influence of Adrenergic Receptors on the Blood Sugar and Lactic Acid Levels in the Rat.

1135. Longmire, Wallace Edwin. A Comparison of Some of the Adrenergic Effects of Guanethidine, Phenoxybenzamine, and Dichloroisoproterenol.
 1136. Masoud, Asaas Nashed. The Effect of AMO-1618, Maleic Hydrazide

1136. Masoud, Asaas Nashed. The Effect of AMO-1618, Maleic Hydrazide and Gibberellin-Seed Treatment on the Second Generation of *Datura tatula* Linn.

#### 1965 - Masters

1137. Lee, Eugene Carlton. A Pharmacognostic Study of the Root of *Heracleum mantegazzianum* Somier et Levier.

# 1961 - Doctors

1138. Knott, Robert Peter. A Phytochemical Analysis of Galium triflorum.

#### 1964 - Doctors

1139. Billups, Norman Fredrick. Preparation and Properties of Bentone Ointment Bases.

1140. Fakouhi, Taghi. Some Pharmacological Mechanisms and the Interrelationship of Bulbocapnine and 5-Hydroxytryptamine on the Cardiovascular System of the Dog.

# **PHYCOLOGY**

#### 1963 - Doctors

1141. Dube, Maurice Andrew. Life History Studies in Monostroma fuscum (Post, and Rupr.) Wittr.

# PHYSICAL CHEMISTRY

#### 1960 - Masters

1142. Fletcher, Gordon Edward. Self-Diffusion of Calcium Ions in Calcium Bentonite Gels.

1144. Hermens, Richard Anthony. Cryoscopy with Hydrazine Salts as Solvent.

1144. Humphreys, Lawrence Lee. The System: Hydrazine Hydrochloride-Water-Ethanol.

1145. Rauch, John Edward. Hyperpolarizability and Forbidden Raman Lines.

#### 1961 - Masters

1146. Hamby, Drannan Carson. Electrode Potentials of Nickel and Cobalt in a Fused Electrolyte.

1147. Singh, Surendra Khatry. Absolute Intensity of the Bending Mode of Chloroform in n-Hexane.

#### 1962 - Masters

1148. Bairakdar, Hiyam. The Radiosulfur Exchange Reaction Between Sulfur Dioxide and Fused Ammonium Bisulfate.

1149. Kennedy, George Hunt. The Adsorption of Water and Methanol Vapors by Organic Complexes of Montmorillonites.

1150. Patterson, Robert Joe. The Interaction of Nitrogen and Carbon Dioxide with Unsupported Organic Films.

1151. Rockholt, Celia Rose. An Electron Diffraction Investigation of the Molecular Structure of Gaseous Fluorine Fluorosulfonate (SO<sub>3</sub>F<sub>2</sub>).

1152. Vander Zanden, Eugene Justin. Surface Areas of Graphite Regenerated from Graphite Oxide.

#### 1963 - Masters

1153. Chan, Edmond James. The Effect of Oxygen, Nitrogen and Carbon Dioxide on Filiform Corrosion.

#### 1964 - Masters

1154. Conant, Dale Holdrege. Application of Electron Microscopy and X-Ray Diffraction to Graphite Oxide and Its Decomposition Products.

1155. Hofeldt, Robert Herman. Integrated Intensities of Carbon Dioxide in Nujol Solutions.

### 1965 - Masters

1156. Ghamkhar, Mehdi. Study of an Exchange Reaction Between an Anion and Hydroxyl Groups in the Soils or Clay Minerals by Isotope Tracer Method.

1157. Oishi, Masayoshi. The Oscillating Zirconium Electrode.

1158. Stewart, Julie Lingscheid. The Infrared Spectrum of the Nitrate Ion In Various Crystalline Environments.

#### 1960 - Doctors

1159. Chittick, Donald Ernest. Kinetics of Bleaching in Colored KC1.

1160. Hills, Marian Elizabeth. Preparation and Properties of Crystalline Potassium Chloride Containing Trivalent Cation Impurities.

1161. Maki, Arthur George. The Infrared Spectrum of Cyanate Ion in Different Environments.

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1162. Seshadri, Kalkunte Srinivasa Iyengar. Absolute Infrared Intensities of the Cyanate Ion in KC1, KBr, and KI Lattice Environment.

#### 1961 - Doctors

1163. Johnson, Wilbur Vance. Calculation of Z-Center Energy Levels.

1164. McDonald, Ray Locke. The Kinetics of the Sulfur (IV) - Sulfur (VI) Isotopic Exchange Reaction in Aqueous and Concentrated Acid Solutions.

1165. Okamoto, Fumio. Formation and Optical Bleaching of Color Centers in X-Rayed Potassium Chloride Crystals.

1166. Woodmansee, Wayne Earl. A Variable Frequency Spectrophone Study of Carbon Monoxide.

#### 1962 - Doctors

1167. Khidir, Abdul Latif. Integrated Intensities of Methyl Iodide in Carbon Tetrachloride Solution and Correction of Slit Error.

1168. Martinez, Joseph Vergara. Studies of Ultrasonic Dispersion in Gases by the Diffraction of Light.

1169. Potter, Norman Douglas. The Catalysis of Nonionic Bases of Radiosulfur Exchange Between Liquid Sulfur Dioxide and Thionyl Chloride.

1170. Rauch, John Edward. Raman Evidence for the Structure of the Hyponitrite Ion.

1171. Seiler, Bernard Carl. Mechanism of Interaction of Graphite Oxide and Ammonia Vapor.

#### 1963 - Doctors

1172. Coker, Earl Howard, Jr. Interactions of Sulfate Ions in Potassium Chloride Crystals.

1173. Conant, Donald Robertson, Jr. Infrared Spectra of Solid Solutions in Alkali Halide Crystals [and] Method for Obtaining Minimal Kinematically Complete Sets of Internal Coordinates.

#### 1964 - Doctors

- 1174. Barnhart, David Merle. The Effect of Temperature on the Molecular Structure of Gaseous Arsenic Tribromide.
- 1175. Nissen, Donald Andrew. A Fused Salt Electrochemical Method for the Separation of Cobalt and Nickel.
- 1176. Watson, Naola VanOrden. The Discharge and Recovery of the Vanadium Pentoxide Electrode.

#### 1965 - Doctors

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- 1178. Lee, Dorothy. The Normal Vibrational Analysis of Polyacetaldehyde.
- 1179. Oden, Laurance Leroy. Infrared Investigation of Some Ferroelectric and Related Compounds: NH4NCS, (NH4)2SO4, RbHSO4, and NH4-HSO4.
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- 1181. Woodley, Robert Earl. Interactions of Electrons and Traps in Potassium Chloride Containing Color Centers.

## **PHYSICS**

#### 1960 - Masters

1182. Evenson, Kenneth Melvin. A Six-Hundred Megacycle Electron Paramagnetic Resonance Spectrometer.

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- 1183. Dow, Shirley Lillian. Neutron Total Cross Sections Using the Optical Model of the Nucleus.
- 1184. Mueller, Robert Allen. A Low Time Constant Electronic Integrator for Time Dependent Functions.
- 1185. Nichols, Lowell Lewis. The East-West Cosmic Ray Effect at Corvallis, Oregon.
- 1186. Schmunk, Donald Fred. Analog Transfer Function Synthesizer.

#### 1962 - Masters

1187. Mansfield, Joseph Alfred. Gamma-Ray Attenuation Factors for Angular Correlation and Angular Distribution Measurements.

# 1963 - Masters

1188. Auborn, James John. Diffusion Theory of the Uniform Positive Column of a Glow Discharge in an Electronegative Gas.

1189. Tucker, Steven Parrington. Electron Drift Velocities in Hydrogen and Deuterium.

### 1964 - Masters

1190. Prince, John Robert. Beam Parameters of the OSU Cyclotron.

### 1965 - Masters

1191. Odegard, Mark Erie. Gravity Interpretation Using the Fourier Integral.

### 1960 - Doctors

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#### 1961 - Doctors

1193. Glasgow, Dale William. Gamma-Gamma Directional Correlation in Magnesium-24.

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1196. Pradhan, Shanker Prasad. Activation Energies for Impurities in Vanadium from Measurements of Internal Friction.

1197. Skinner, John George. Some Dielectric Breakdown Properties of Oxygen with 3.2 cm Radiation.

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1205. Sommerfeldt, Raymond Walter. Perturbed Directional Correlation in Ta-181.

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#### 1964 - Masters

1206. Bogar, Gerald Dale. Root Initiation and Differentiation in *Pseudotsuga menziesii* (Mirbel) Franco.

1207. Doerksen, Allan Harold. The Effects of Balsam Woolly Aphid Infestations on Wood Anatomy of True Firs.

1208. Owens, John Neal. Origin and Differentiation of the Seed Cone of Pseudotsuga menziesii (Mirbel) Franco.

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1211. Brown, Eugene Allen. Early Stages in Plant Succession on Douglas Fir Clearcuts on the Marys Peak Watershed Near Corvallis, Oregon.

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1212. Robinson, Myles Canby. Temperature Microenvironments Associated with Early Stages in Plant Succession on Douglas-Fir Clear-Cuts in the Oregon Coast Range.

### 1965 - Masters

1213. Green, Diantha Louise. Development History of European Beachgrass (Ammophila arenaria (L.) Link) Plantings on the Oregon Coastal Sand Dunes.

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- 1214. Hermann, Richard Karl. The Influence of Seedbed Micro-Environments
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- 1215. Silen, Roy Ragnar. Lethal Surface Temperatures and Their Interpretation for Douglas-Fir.
- 1216. Van Vechten, George Wendell, III. The Ecology of the Timberline and Alpine Vegetation of the Three Sisters, Oregon.

#### 1961 - Doctors

- 1217. Pechanec, Anna Alice. Some Aspects of the Ecology of the Bryophytes in the Three Sisters Primitive Area.
- 1218. Swedberg, Kenneth Charles. The Coniferous Ecotone of the East Slope of the Northern Oregon Cascades.

### 1962 - Doctors

1219. Gratkowski, Henry John. Heat as a Factor in Germination of Seeds of Ceanothus velutinus var. Laevigatus T. & G.

### 1963 - Doctors

- 1220. Bailey, Warren Hutchinson. Revegetation in the 1914-1915 Devastated Area of Lassen Volcanic National Park.
- 1221. Kumler, Marion Lawrence. Succession and Certain Adaptative Features of Plants Native to the Sand Dunes of the Oregon Coast.

1222. Peak, Chester Allen. The Humic Water of Klamath Marsh and Its Effect on the Growth of *Anabaena cylindrica* Lemm. in Culture.

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- 1223. Newton, Michael. The Influence of Herbaceous Vegetation on Coniferous Seedling Habitat in Old Field Plantations.
- 1224. Thilenius, John Fredrick. Synecology of the White-Oak (*Quercus garryana* Douglas) Woodlands of the Willamette Valley, Oregon.

### 1965 - Doctors

1225. West, Neil Elliott. An Analysis of Montane Forest Vegetation on the East Flank of the Central Oregon Cascades.

## PLANT PATHOLOGY

### 1960 - Masters

- 1226. Chantanao, Aroon. The Use of Certain Indicator Plants for a Rapid Detection of Root-Knot Nematodes in Soil Samples.
- 1227. Sikorowski, Peter Paul. Dissemination of Spores of Elytroderma deformans (Weir) Darker.
- 1228. Skoe, Donald Edward. Resistance in Hops to Systemic Rootstock and Crown Infection by Downy Mildew.

#### 1961 - Masters

1229. Loman, August Adriaan. *In Vitro* Decay of Lodgepole Pine Blocks by Several Slash-Inhabiting Hymenomycetes.

### 1962 - Masters

- 1230. Halber, Max. Botrytis Infection of Douglas-Fir Seedlings and Its Control with Thiram.
- 1231. Lamptey, Paul Nii Lante. Response of Hannchen Barley to the Yellow Dwarf Virus Disease as Modified by Nitrogen and Phosphorus.
- 1232. Sandeno, James Louis. Diseases of Western Sword-Fern, *Polystichum munitum* (Kaulf.) Presl.

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- 1233. Dimalla, Gerald George. Latent Viruses in Apple Varieties in Oregon Nurseries.
- 1234. Guilford, Roger Kirby. Fungitoxicity of Silver Salts.
- 1235. Sen, Arun Kumar. Bionomics of the Clover Cyst Nematode, *Heterodera trifolii* (Goffart, 1932) Oostenbrink, 1939. (Nematoda: Heteroderidae).

- 1236. Koocheki, Hormozdyar Khodadad. The Role of *Verticillium albo-atrum*Reinke and Berth. in Seed Transmission and Induction of a Latent Disease of *Pelargonium*.
- 1237. Lin, Shu-Yen. Interrelationships Between Fungi Associated with the Damping-Off Disease of Table Beets in Oregon.
- 1238. Liu, Kang-Chien. Comparison of the Host Range and Physical Properties of Eola Rasp Leaf, Tobacco Ringspot and Tomato Ringspot Viruses.

## 1960 - Doctors

1239. Herridge, Elizabeth Anne. Anatomy and Pathology of Leaf Spots on English Holly, *Ilex aquifolium* (Tourn.) L.

1240. Lambe, Robert Carl. The Influence of Temperature, Moisture, and Method of Application on the Fungitoxicity of Mylone and Vapam.

1241. Nadakavukaren, Mathew Joseph. The Effect of Soil Moisture and Temperature on Survival of Verticillium microsclerotia.

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1242. Das, Chitta Ranjan. Seed and Pollen Transmission of Cherry Ring Spot Virus in Buttercup Squash.

1243. Konicek, Donald Edward. Ecology of *Longidorus menthasolanus*, Konicek and Jensen 1961, a Parasite on Peppermint in Oregon.

1244. Kuhlman, Elmer George. Survival and Pathogenicity of *Phytophthora cinnamomi* Rands in Forest Soils.

1245. Murphy, Donald Guy. Taxonomy of Marine Nematodes Occurring Along Pacific Northwest Coasts.

## 1962 - Doctors

1246. Bhatt, Dibya Deo. Role of Associated Fungi in the Prevention of Gray Mold (Botrytis cinerea Pers.) of Strawberries.

1247. Davison, Arlen Durant. Factors Affecting the Identification of Races of *Uromyces phaseoli* (Pers.) Wint. Var. *Phaseoli*.

1248. Halliwell, Robert S. Isolation, Purification, Serology and Nature of Rose Mosaic Virus.

1249. Hess, Wilford Moser. Pink Root of Onion Caused by Pyrenochaeta terrestris.

1250. Hikida, Hideaki Robert. Races of Bean Rust, *Uromyces phaseoli* (Pers.) Wint. Var. *Phaseoli*, in the Willamette Valley.

1251. Houck, Laurie Gerald. Factors Influencing Development and Control of *Phytophthora fragariae* Hickman, the Cause of Red Stele Disease of Strawberries.

1252. Hussin, Hamid Mohammed. Effects of Mineral Nutrition on Development of Crown Gall Caused by Agrobacterium tumefaciens.

1253. Nelson, Earl Edward. *Poria weirii* Root Rot of Douglas-Fir: Survival of the Pathogen and Infection of the Host.

1254. Patil, Suresh Siddheshwar. The Relation of Chlorogenic Acid and Total Free Phenols in Potato Plants to Resistance to Infection by Verticil-lium albo-atrum.

1255. Roth, Johathan Nicholas. Variation in, and the Effects of Vitamins on Verticillium albo-atrum.

1256. Turner, Nathan Joe. Decomposition of Sodium N-Methyl Dithiocarbamate, Vapam, in Soil.

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1257. Bartlett, Allan B. Relation of Nitrogenous Substances in Rose Leaves to Powdery Mildew Resistance.

1258. Lawson, Roger Harold. Isolation and Identification of Dahlia Viruses.

1259. Yadav, Babu Singh. Effect of Ultraviolet and Visible Radiation on the Sporulation of Species of *Helminthosporium*.

1260. Young, Robert J. Characterization of Pectic Enzymes Produced by Fusarium oxysporum F. Lycopersici.

#### 1964 - Doctors

- 1261. Beckman, Kent Marsden. Physical Factors Affecting Longevity and Germination of Seed of Western Dwarfmistletoe (Arceuthobium campylopodum Engelm. F. Campylopodum).
- 1262. McDowell, Larry Leon. Physiological Relationships Between Dwarf Mistletoe and Ponderosa Pine.
- 1263. McIntire, Charles David. Laboratory Studies of Periphyton Production and Community Metabolism in Lotic Environments.
- 1264. McIntyre, Gary Allen. Production of Pectic Enzymes by Verticillium albo-atrum.
- 1265. Martinson, Charlie Anton. Active Survival of Verticillium dahliae in Soil.
- 1266. Reynolds, James Edward. The Use of Flowering Crab Apples for the Detection of Latent Viruses in Apples.

## 1965 - Doctors

- 1267. Bhullor, Sukhbir. Methods of Separating Viruses from the Inhibitors Present in Chenopodium amaranticolor.
- 1268. Brown, William Malcolm, Jr. A Leaf Spot Disease of English Holly Caused by an Undescribed Species of Sclerophoma.
- 1269. Lacy, Melvyn Leroy. Influence of Host and Non-Host Plants Upon Populations of *Verticillium dahliae* in Soil.

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## 1961 - Masters

1270. Boonnitee, Aht. The Effect of Thiourea With and Without Heat on the Breaking of Dormancy and Production of Secondary Dormancy in Douglas Fir Seeds.

## 1962 - Masters

1271. Dever, John Edward, Jr. Plant Production in a Woodland Stream Under Controlled Conditions.

## 1964 - Masters

1272. MacMillan, Paul Carver. Characteristics of the Enzyme System Responsible for Melanin Formation in Verticillium.

## 1961 - Doctors

1273. Dawson, James Robert. Factors Affecting the Uptake of Iron in Spirodela oligorhiza (Kurtz) Hegelm.

## 1962 - Doctors

1274. Lavender, Denis Peter. The Growth of Seedlings of Some Coniferous Species in a Controlled Environment.

#### 1963 - Doctors

- 1275. Krueger, Kenneth William. Comparative Photosynthesis and Respiration Rates of Douglas-Fir Seedlings from Vancouver Island and Montana Under Various Conditions of Light and Temperature.
- 1276. Lowe, Richie Howard. Some Properties of a Particulate and a Soluble Nitrate Reductase from *Rhizobium japonicum*.

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1277. De Hertogh, August Albert. Enzymatic and Respiratory Studies on the Role of Cobalt in Legumes.

## POULTRY HUSBANDRY

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## POULTRY SCIENCE

## 1961 - Masters

1278. Rose, Ronald Joseph. Utilization of Barley as a Replacement for Corn by Poultry.

## 1962 - Masters

1279. Rachapaetayakom, Prateap. Factors Influencing Calcium Requirement of Layers as Related to Certain Reproductive Characters.

#### 1964 - Masters

1280. Kellerup, Stanley Ulrick. Effect of Restriction of Water Intake on Growth and Feed Consumption of Broiler Chickens.

## 1965 - Masters

1281. McKeen, William David. Folic Acid Response of Chicks and Poults Fed Diets Containing Ingredients from Natural Sources.

# RADIO COMMUNICATIONS

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## RANGE MANAGEMENT

SEE Farm Crops

## SANITARY ENGINEERING

SEE Civil Engineering

## SCIENCE EDUCATION

SEE Education, General Science

## SILVICULTURE

SEE Forest Management

## SOILS

## 1960 - Masters

1282. Cattani, Ray August. Ammonium and Ammonia Fixation in Some Oregon Soils.

1283. Yahner, Joseph Edward. Response of Alfalfa Under Greenhouse and Field Conditions in Relation to Fertility and Chemical Properties of Two Upland Soils of Oregon.

#### 1961 - Masters

1284. Norero, Aldo Luis. Relationship Between Date of Planting and Rate and Method of Fertilizer Applications on Yield, Test Weight and Kernel Size of Hannchen Barley.

1285. Robinson, Luther Henry, Jr. Geography, Morphology and Environmental Relationships of the Walla Walla Soil Series in Oregon.

## 1962 - Masters

1286. McNeal, Brian Lester. The Electrochromatographic Behavior of Some Layer-Silicate Minerals.

1287. Norgren, Joel Arvid. Thin-Section Micromorphology of Eight Oregon Soils.

1288. Wipper, Wallace John. Characterization of Alkali Bee Nesting Sites.

1289. Witty, John Edward. Grass Opal in Some Chestnut and Forested Soils of Wasco County, Oregon.

1290. Wollum, Arthur George. The Role of Certain Non-Leguminous Woody Species in the Nitrogen Nutrition of Some Conifer Seedlings.

#### 1963 - Masters

1291. Cochran, Patrick Holmes. First Year Development of Three Conifers on Surface and Exposed Subsoil Horizons.

1292. Etter, Harold MacDonald. Chemical Properties of Soils Related to Seasonal Fluctuations in Exchangeable Potassium.

1293. Rojanasoonthon, Santhad. State of Weathering of Some Upland Soils in the Alsea Basin, Oregon.

1294. Silva Norambuena, Bernardo. Nature of Calcium Uptake by Plants.

## 1964 - Masters

1295. Andersen, Jimmie Lee. Response of Field Corn to Irrigation, Plant Population, and Nitrogen on Soils of the Willamette Catena.

## 1965 - Masters

1296. Carstea, Dumitru Dumitru. Conditions of Al, Fe, and Mg Interlayer Formation in Montmorillonite and Vermiculite.

1297. Westermann, Dale Thomas. The Effect of Chloride on the Uptake of Manganese by Bush Beans and Sweet Corn.

#### 1960 - Doctors

1298. Chao, Tsun-Tien. The Movement and Adsorption of Sulfate Ions in Soil Systems.

1299. Dyrness, Christen Theodore. Soil-Vegetation Relationships Within the Ponderosa Pine Type in the Central Oregon Pumice Region.

1300. Gardner, Ernest Hugh. Potassium Release from Several Western Oregon Soils and Its Relationship to Crop Growth and Soil Mineralogy.

#### 1961 - Doctors

1301. Al-Jibury, Falih Khidir. Saturated Water Permeability of Soils as Related to Air Permeability at Different Moisture Tensions.

1302. Carter, David La Vere. Increases in Exchangeable Potassium Upon Drying of Soils and Clays.

1303. Jenne, Everett Arthur. Mineralogical, Chemical, and Fertility Relationships of Five Oregon Coastal Soils.

1304. Pomerening, James Albert. A Test of the Differentiation of the Soil Series Within the Willamette Catena.

## 1962 - Doctors

- 1305. Ashcroft, Gaylen Lamb. Gaussian Elimination Technique for Solving the Diffusion Equation for Moisture Movement in Unsaturated Soil.
- 1306. Beattie, John Alfred. Groundsurfaces and Soils in the Willamette Valley, Oregon.
- 1307. James, David Winston. Sorption of NH₃ in a Dry System in Relation to the Chemical Properties of Clays and Soils.
- 1308. Vacharotayan, Sorasith. Correlation of Phosphorus Soil Tests and Forms of Inorganic Soil Phosphorus with Crop Response and Phosphorus Uptake from Aiken Soils.

#### 1963 - Doctors

- 1309. Stevenson, David Stuart. Effects of Soil Moisture-Tension on Rubidium Uptake by Sunflowers.
- 1310. Yahner, Joseph Edward. Interrelations of Magnesium, Lime, and Potassium in Broccoli Grown on Two Western Oregon Soils.

## 1964 - Doctors

1311. Sayegh, Antoine Hanna. Changes in Lattice Spacing of Expanding Clay Minerals.

## 1965 - Doctors

1312. Wollum, Arthur George. Symbiotic Nitrogen Fixation by Ceanothus Species.

## **STATISTICS**

## 1962 - Masters

- 1313. Schroeder, Arnold Leon, Jr. Surface Fitting and Some Associated Confidence Procedures.
- 1314. Thomas, David Reginald. Multivariate Functions Applied to Long-Range Weather Forecasting.

#### 1964 - Masters

- 1315. Burnett, Thomas Danforth. Parameter Estimation in a Stochastic Model of Ocean Currents.
- 1316. Butler, Stephen Walter. Behavior of Estimates of the Mean Life of a Radioactive Source.
- 1317. Peura, Bonita Jean. A Probability Model for Irradiated Bacteria and Methods to Obtain Estimates of the Parameters.

## 1965 - Masters

- 1318. Hicks, Ronald Herbert. An Evaluation of the Punch Card Method of Estimating Salmon-Steelhead Sport Catch.
- 1319. Maki, William Richard. Integer Programming for Optimized Facility Location.
- 1320. Reinmuth, James Elroy. Statistical Considerations in Portfolio Selection.
- 1321. Sakarindr, Preecha. Multinomial Estimation from Censored Samples.

# STRUCTURAL ENGINEERING

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# SYSTEMATIC BOTANY (TAXONOMY)

#### 1960 - Masters

1322. Dean, Milton Lee. A Taxonomic and Ecologic Study of the Vascular Plants of a Section of the Owyhee River Canyon in Oregon.

#### 1961 - Masters

1323. Johnson, John Morris. Taxonomy and Ecology of the Vascular Plants of Black Butte, Oregon.

## 1963 - Masters

1324. Pembrook, Helen Patricia O'Donahue. An Illustrated Key to the Ferns of Oregon.

#### 1964 - Masters

1325. Carlbom, Curt Gerald. An Experimental Taxonomic Study of a Northwest American Polyploid Species, *Scrophularia lanceolata* Pursh.

#### 1964 - Doctors

1326. Templeton, Bonnie Carolyn. The Fruits and Seeds of the Rancho La Brea Pleistocene Deposits.

## TEXTILES

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## TRADE AND INDUSTRIAL EDUCATION

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## VETERINARY MEDICINE

## 1961 - Masters

1327. Harr, James Royce. Serologic Indications of Immunity to Erysipelothrix rhusiopathiae (Loeffler) in Swine.

## 1965 - Masters

1328. Dutson, Val J. Fascioloidiasis of Cattle, Deer and Elk in Oregon and Southern Washington.

## VISUAL EDUCATION

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## WILDLIFE MANAGEMENT

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#### 1962 - Masters

1329. Zalunardo, Raymond Alfred. The Range and Movements of Mule Deer in a Central Oregon Herd.

## 1963 - Masters

1330. Neider, David Standish. Population Dynamics of Enclosed Microtus montanus (Peale) in Relation to Cover and Density.

#### 1965 - Masters

1331. Belden, Lonnie Mack. Agonistic Behavior in Montane Voles, *Microtus montanus*, from Different Parent Population Densities.

1332. Giger, Richard Dee. Home Range, Dispersal, Homing and Density of the Townsend Mole Scapanus townsendii (Bachman) Near Tillamook, Oregon.

## WOOD CHEMISTRY

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# WOOD PRODUCTS

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## ZOOLOGY

#### 1960 - Masters

- 1333. Stewart, Glenn Raymond. Observations on Respiratory Metabolism in the Red-Spotted Garter Snake, *Thamnophis sirtalis concinnus* (Hallowell).
- 1334. Puyear, Robert Louis. Assays of Adrenal Gland Activity in the White Mouse.
- 1335. Swedberg, Gertrude Laliah. A Spectrophotometric Study of Protein and Deoxyribonucleic Acid in Nuclei of Varying Y Chromosome Dosage in *Drosophila melanogaster* Meigen.

1336. Weatherly, Norman Fred. Rhizocephalan Parasites of Hermit Crabs in the San Juan Archipelago.

#### 1961 - Masters

- 1337. Wyatt, Ellis Junior. A Myxosporidian from the Musculature of Spring Chinook Salmon.
- 1338. Bawdon, Eugene Dale. The Effect of Thiouracil on the Daily Activity Patterns of the Golden-Crowned Sparrow Zonotrichia atricapilla (Gmelin).
- 1339. Heath, Alan Gard. Alterations in Metabolic Rate and Blood Lactate of Bluegill Sunfish, *Lepomis macrochirus* Rafinesque, Following Severe Muscular Activity.
- 1340. Leeling, Norman Charles. Histology of the Circulating Blood of Gerrhonotus coeruleus (Baird and Girard), the Northern Alligator Lizard.
- 1341. Monroe, James Ernest. The Chromosomes of the Two Oregon Subspecies of *Crotalus viridis* (Rafinesque).
- 1342. White, Ronald Jerome. The Physiological Activity of Some Plant Estrogens.

## 1962 - Masters

1343. Beck, William Mark. Studies on the Vertebrate Ecology of a Bottomland Woods in the Central Willamette Valley.

1344. Belton, John Clair. A Histological Study of the Digestive System of Ascaphus truei (Stejneger).

1345. Hamilton, Grace Anne. Food Web Studies in an Oak Woodland Ecosystem.

1346. Kerley, David Emmet. Osmoregulation in Two Geographically Isolated Populations of Fresh Water Crayfish.

1347. Turner, Lewis McDonald. Oxygen Uptake of Tissue from Normal and Destalked Crayfish (Pacifastacus sp.) Bott.

## 1963 - Masters

1348. Crandell, George Frank. The Life Cycle of a Progenetic Trematode (Opecoelidai) from Cottus asper.

1349. Morse, Howard Curtis. The Fine Structure of the Fibrillar Club Cell in the Epidermis of Lampetra planeri (Bloch).

1350. Neeley, John Charles. Crossing-Over in a Reversed Acrocentric X-Chromosome in Triploid Drosophila melanogaster (Meigen).

1351. Voth, Elver. A Survey of the Vertebrate Animals of Mount Jefferson, Oregon.

## 1964 - Masters

1352. Kneeland, Jean Elisabeth. Fine Structure of the Interstitial Cells of the Anterbrachial Organ of Lemur catta.

1353. Martin, Gordon Wyatt. Nematode Associates and Parasites of the Douglas Fir Beetle Dendroctonus pseudotsugae Hopkins with Notes on Biological Control.

1354. Merritt, Sheridan Vernon. The Life History of Neoechinorhynchus rutili (Mueller, 1780) and Its Development in the Intermediate Host (Acanthocephala; Neoechinorhynchidae).

1355. Porter, Clarence Alan. The Morphology of the Reproductive Tracts of the Pacific Northwest Pulmonates.

1356. Rinard, Gilbert Allen. Effects of Chronic Estrogen Treatment on Uterine Nucleic Acids.

1357. Ritschard, Ronald Laird. The Patterns of Development and Distribution of Collagen, Reticulin, and Elastin in the Placentae of the Golden Hamster (Mesocricetus auratus Waterhouse).

1358. Thompson, Steven Risley. Induction of Gross Deletions in Ring-X and Rod-X Chromosomes of *Drosophila melanogaster* (Meigen).

1359. Yuen, Rosalind Wai-Ping. Respiration of Crayfish in Different Salinities.

## 1965 - Masters

1360. Belcik, Francis Peter. The Morphology of Ismaila monstrosa Bergh (Copepoda).

1361. Dorsch, John Andrew. Reproduction in Chinchilla: Superovulation.

1362. Longo, Frank Joseph. Cytophotometric Determinations of Nuclear DNA Content in Tissues of the Wax Moth Larva, Galleria mellonella Linnaeus.

1363. Moldenhauer, Ralph Roy. An Investigation of the Feeding Pattern of Caged White-Crowned Sparrows, Zonotrichia leucophrys gambelii (Nuttall), in Relationship to Vernal Fat Deposition.

1364. Schamberger, Melvin Louis. An Analysis of a Small Mammal Population Census.

1365. Spencer, Larry Thomas. A Morphological Study of Gonatid Squids Found off the Oregon Coast.

1366. Van Tassel, Loren Eugene. Glycogen Utilization in Newborn Rats Subjected to Cold Stress.

## 1960 - Doctors

1367. Aldrich, Lewis Eugene, Jr. Digenetic Trematodes from Marine Fishes in the San Juan Archipelago.

1368. Thoresen, Asa Clifford. Breeding Behavior and Growth Rates of Cassin's Auklet Ptychoramphus aleutica (Pallas).

1369. Tikasingh, Elisha Sevjit. Endoparasitic Gastropods of Puget Sound Holothurians.

## 1961 - Doctors

1370. Canaris, Albert George. Platyhelminth Life Cycles Involving Land Snails of Western Oregon and Washington.

1371. Clothier, Galen Edward. Cyclic Uptake of Calcium-45 by Dividing Sea Urchin Eggs.

1372. Davis, Clifford Vernon. A Distributional Study of the Birds of Montana.

1373. Stanley, Hugh Palmerlee. Studies on the Genital Systems and Reproduction in the Chimaeroid Fish *Hydrolagus colliei* (Lay and Bennett).

1374. Wirtz, John Harold. The Golden-Mantled Ground Squirrel, Citellus lateralis chrysodeirus (Merriam), Its Social and Community Interactions.

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1375. Ford, James Marshall. The Chromosomes of Northwest Pulmonate Snails.

1376. Newstead, James Duncan MacInnes. Epithelial Ultrastructure in the Vas Deferens of the Sow Bug, Porcellio scaber (Latreille).

1377. Watling, Harold. A Combined Study of the Growth of the Grayling (Thymallus arcticus) and the Development of Its Olfactory Apparatus.

## 1963 - Doctors

1378. Danforth, Charles Garrison. Bopyridian (Crustacea, Isopoda) Parasites Found in the Eastern Pacific of the United States.

## 1964 - Doctors

1379. Anderson, Glenn Arthur. Digenetic Trematodes of Ascaphus truei in Western Oregon.

1380. Beltz, Joan Dunkel. An Analysis of Vocalizations of the Rufoussided Towhee, *Pipilo erythrophthalmus oregonus* (Bell).

1381. DeMartini, John David. The Life Cycle of the Trematode Telolecithus pugetensis Lloyd & Guberlet, 1932.

1382. Heath, Alan Gard. Physiological Alterations Following Severe Hypoxic Stress in Two Species of Fresh-Water Fish.

1383. Stewart, Glenn R. Thermal Ecology of the Garter Snakes Thamnophis sirtalis concinnus (Hallowell) and Thamnophis ordinoides (Baird & Girard).

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1384. Adams, Frank William. Placental Resorption During Vitamin E Deficiency in the Golden Hamster (Mesocricetus auratus).

1385. Black, Hugh Clark. An Analysis of a Population of Snowshoe Hares (Lepus americanus washingtonii Baird) in Western Oregon.

- 1386. Johnson, Oliver William. Early Development, Embryonic Temperature
  Tolerance and Rate of Development of Rana pretiosa luteiventris
  Thompson.
- 1387. Meade, Thomas Gerald. Description and Life History of Cardicola alseae Sp.N. (Trematoda: Sanguinicolidae).
- 1388. Puyear, Robert Louis. Catabolic Pathways of Carbohydrate in the Intermolt Crayfish, Pasifastacus leniusculus.

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