

# Director named for nuclear research reactor



*Dr. Ardath H. Emmons*

The University's projected nuclear research reactor, made possible by a \$1,250,000 state appropriation, will be directed by Dr. Ardath H. Emmons, nuclear scientist at the University of Michigan. In addition to being Director of the University Research Reactor Facility, Dr. Emmons will have the title of associate professor of chemical engineering. He assumed his duties last month.

In 1955 he was employed by the Phoenix Project of the University of Michigan to assist in designing the Phoenix Laboratory and the Ford Nuclear Reactor at the University of Michigan, and has since been laboratory supervisor. The Ford Nuclear Reactor is similar in size and power to the nuclear reactor planned for the University of Missouri.

At Missouri Dr. Emmons will be responsible for the design and specifications of the reactor installation. He will oversee the purchase and construction of the reactor, and will be directly in charge of all research and instructional uses of the research reactor.

An advisory committee made up of persons from the various fields of science at the University will advise and consult with the director in matters that relate to nuclear research.

Dr. Emmons was recommended to the President of the University and the Board of Curators by a faculty Research Reactor Committee of which Dean Huber O. Croft of the College of Engineering is chairman. Other members are Dr. Eugene B. Hensley, associate professor of physics; Dr. Raymond E. Peck, acting Dean of the Graduate School; Dr. Gwilym S. Lodwick, associate Dean of the School of Medicine and professor of radiology and chairman of the department; Dean W. Francis English of the College of Arts and Science; and Acting President Longwell, who is Dean of the College of Agriculture and Director of the Division of Agricultural Sciences.

"We are particularly delighted that Dr. Emmons has accepted this responsibility at the University of Missouri," Dean Croft said, "because of his extremely valuable experience in the design and operation of the research reactor at the University of Michigan. That university has a multitude of science departments using the facilities of a research reactor, and therefore Dr. Emmons has had considerable experience in directing the use of a reactor for research in a variety of fields similar to those existing at this University."

The General Assembly bill appropriating state funds for the reactor was signed last June by Gov. James T. Blair, Jr. In addition to the State funds the University expects to obtain matching funds from Federal government and private sources before final decisions on the reactor project are made. Ultimately it will become a \$3,000,000 teaching and research facility. With the appointment of Dr. Emmons active planning of the project will start, Dean Croft said.

It is expected to take about a year to prepare the plans and specifications for the reactor facility, and to receive bids on the laboratory, according to Dean

Croft. Another year will be needed to complete the structure to house the facility.

The benefit of the reactor to the people of Missouri and of the entire nation is indicated by the fields of research and teaching it will open or expand at the University. Some of those fields are radiobiology; malignant diseases; tracer studies in drugs and for industrial applications; radioactive isotopes in soils; radioactive damage to construction and industrial materials; radiation physics and chemistry; radiation safety; genetic effects of radiation on plant and animal life; metabolism in plants and animals; nuclear fallout and kindred health problems; problems of nuclear waste disposal; sewage treatment; nuclear reactor theory and operation; nuclear power plants and their auxiliary equipment; the use of thermal neutrons to determine the properties of matter.

It is considered certain by the University that the research reactor will: serve as a stimulus to research in science and engineering for the University and for this section of the country in a number of ways; provide modern facilities for those now on the staff to undertake research problems that are either impossible or difficult to do otherwise; tend to attract and to retain vigorous and competent young men to the staff of the University and to the student body; provide the University with the opportunity to assist industries of Missouri and neighboring states in the solution of their problems associated with the growing application of nuclear facilities; serve as a focal point in the training of scientists and engineers in a relatively new field of study.

The advantageous location of the University in the center of Missouri makes this institution especially suited to become a major nuclear research center, says President Elmer Ellis. It is the only university within a 500-mile radius that includes such a complete field of knowledge, teaching and research on one campus. It is in a rural area suited by space and safety considerations for the location of a reactor, yet most conveniently placed for access by the many agricultural, chemical, petroleum, food and other industries of Missouri.

"In addition, Ellis Fischel Cancer Hospital is nearby in Columbia and would find the reactor facilities a valuable asset in its studies and treatment of cancerous growths," Dr. Ellis said. "On the University campus itself is the new, modern Medical Center with its School of Medicine and Hospital serving the people of the entire state; an outstanding agricultural college engaged in unceasing research and teaching; and other schools and colleges concerned with all the varied aspects of science."

The broadest use of the reactor's facilities will be for the production of artificially radioactive materials, and especially "short-lived" isotopes, which have become one of science's most versatile tools for basic and applied research. Radioactive isotopes have an infinitely varied use that ranges from the diagnosis or treatment of diseases to the determining of the food requirements and food conversion of plants or the detecting of flaws in machinery.



Mrs. George A. Rozier



T. Hartley Pollock

## 'Friends of Library' formed

A new organization to advance the welfare of the University Library is opening its doors wide to all who have an interest in adding to the quality and size of the Library's listings.

"Friends of the University of Missouri Library" is the name of the recently organized group. Mrs. George A. Rozier of Jefferson City was elected president. Other officers are T. Hartley Pollock of St. Louis, vice-president; and Dr. Lewis Atherton, professor of history, secretary.

As stated in the constitution, "The purpose of the Friends shall be to maintain an Association of persons interested in books and in the University of Missouri Library; to assist in bringing to the University of Missouri important library materials, both manuscripts and books."

Members of the group will serve as "scouts" in keeping the Library informed of important material which may become available to the Library either by gift or purchase. Conditions of membership are within reach of everyone and are outlined on the opposite page. There are more than 400 such organizations throughout North America, working with public, institutional and private research libraries.

The Missouri organization will have an open house and dinner meeting this spring, with President Elmer Ellis as the speaker.

Mrs. Rozier, who holds an A.B. degree from the University, is an alumni member of Phi Beta Kappa. She has been secretary and chief clerk of the Missouri State Eleemosynary Board, a long-time member of the Missouri Library Commission and twice its president. In 1956 she received a Citation of Merit from the University Alumni Association and the College of Arts and Science.

Mr. Pollock, St. Louis lawyer with an A.B. degree from the University, was president of the St. Louis Bar Association in 1955-56. During his term he was instrumental in initiating several actions and programs that gained wide notice. On the campus he was prominent in varied activities, was a member of several honorary organizations, and served as student president in 1927-28, his senior year. He received his LL.B. at Harvard.