Year of research successful—ARF

Scientific progress on more than 150 widely varied research projects is described in an annual report issued by Dr. Haldon A. Leedy, director of Armour Research Foundation of Illinois Institute of Technology.

The fiscal year 1949-1950 was the most successful in the 14-year history of the Foundation, Dr. Leedy stated in the 56-page report.

Armour's staff of almost 700 persons undertook a total of 337 projects, he reported. This represented an investment of $4,614,958, an increase of 12.1 per cent over the previous year.

Foundation scientists and engineers specialize in the applied sciences, including physics, metallurgy, ceramics, mechanics, chemistry, and electrical engineering. They form research teams to solve many problems. A physicist, chemist, and metallurgist might pool their talents on one project, for example.

Such varied subjects as palm oil, scouring cleanser, human muscles, music, and aircraft windshields received the professional attention of researchers at Armour during the year.

The Foundation's work is supported by industrial concerns and government agencies who sponsor individual projects. It is a not-for-profit, non-endowed scientific research organization, and any excess of income over expenses is used to finance fundamental research and defray cost of public service activities.

Here are a few representative achievements:

Physicists predicted the acoustics of a music pavilion before it was built, through ultrasonic studies on a scale model of the structure.

Chemists developed a photographic film that will operate at temperatures ranging from 65 degrees below to 140 degrees above zero Fahrenheit.

Engineers studied the design of aircraft windshields which incorporate transparent, electrically conductive films for anticing.

Ceramists invented a way to measure the cleaning efficiency of a scouring cleanser.

Electrical engineers constructed instruments that record electrical signals obtained from electrodes inserted into muscles.

Metallurgists found a substitute for palm oil in hot dip tinning which is especially promising in regard to domestic supply, quality, and economics.

Of direct aid to the nation's defense effort were projects on rockets, cosmic rays, recoilless rifles, jet engines, low temperature lubricating oils, a flight simulator, and aviation fuel.

"An increasing number of projects directly concerned with national security can be expected," Dr. Leedy predicted. "Armour Research Foundation is prepared to carry out its share of this research mission."

The International Division of the Foundation surveyed technological conditions for the Republic of El Salvador and Cuba during the year. A new industrial research institute was established in Mexico City by the Bank of Mexico, and an Armour staff member acts as director of laboratories there.

The Foundation introduced a radically improved form of magnetic recording shortly before World War II. Today a Magnetic Recorder Division serves 46 companies licensed under Armour's patents.

Physicists have taken more than 50,000 measurements of city noise in a methodical survey of urban clamor. The new information will be helpful to lawmakers and city planners.

Another public service is the National Registry of Rare Chemicals, a card file of information on sources of 21,500 compounds. Last year the Registry answered 8,000 inquiries from scientists the world over.

In the field of housing research, Armour undertook a long-term program for the Structural Clay Products Research Foundation last year. Other projects included the investigation of a steel building panel, a study of sound transmission through windows, and the development of light-weight aggregates for concrete.

The physics and electrical engineering departments moved into a newly remodelled Physics Research building recently. The metals department acquired two new laboratories, and other departments added to their research facilities.

Of the 337 projects active during the year, 182 were sponsored by industrial concerns, 94 by government agencies, and 61 by the Foundation itself.

Charity fund nets $930 this semester

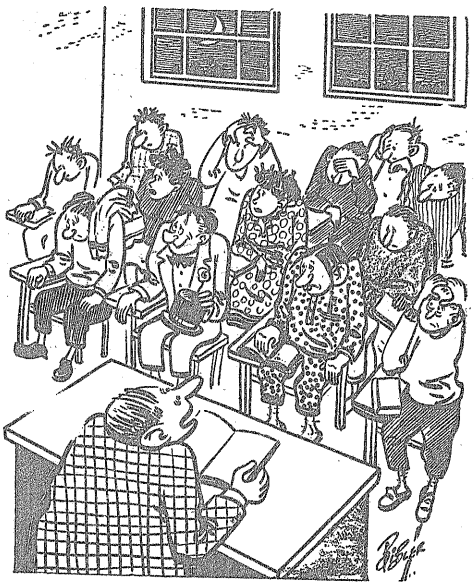
The annual charity drive held during the registration period this semester netted a total of $930 for day school students.

This semester's total may be compared with that of last semester's $1,094. But in propsrtion to students enrolled, this semester netted more. Last semester the average was forty cents per student, while this semester the average was forty-five cents per student.

The money taken in during the drive will be distributed as follows: American Red Cross, 5%; Community Fund, 15%; Sister Kenny Foundation, 10%; Ada S. McKinley community house, 35%; Chicago Heart association, 5%; Salvation Army, 10%; World Student Service fund, 10%; Spastic Paralysis, 5%; cancer fund, 5%.

Helping in the collection of funds and in publicizing the drive by means of posters and pamphlets were Ted Spath, Bob Bonin, and George Aravosis.

The charity drive during registration is the only drive for funds which is held on campus throughout the entire semester.



"Some of you may find it difficult, at first, to adjust yourselves to this early morning class period."