

# Grant given to Dr. Frocht for stress analysis research

A \$4,000 research grant has been awarded to Dr. Max M. Frocht, research professor of mechanics, by the Research corporation, New York, for fundamental study in three dimensional photoelastic stress analysis. Dr. Frocht's job will be to extend the scope of photoelasticity to general problems and to improve the method for symmetrical problems. It will include a study of fundamental principles, perfecting methods and techniques, and an application to practical problems.

Photoelasticity is an experimental method of determining stress by applying loads to transparent models of real objects in a polariscope and analyzing quantitatively the pattern produced by the interaction of the polarized light with the model.

Until recently photoelasticity has been confined mainly to two dimensions, the stress in depth assumed to be constant. In three-dimensional work, studies have been limited to symmetrical objects.

The study today rests, in the main, on the ability to permanently freeze or fix a pattern into a material after the loads have been removed. Progress in three-dimensional photoelasticity has been accelerated by the development of "Fosterite" a material of greater stability than previous materials.

# Sam Levin wins naval appointment

Sam Levin, ME 6, has received an appointment to the U. S. Naval academy. He won the appointment on the basis of a competitive examination for the Chicago Congressional district. Levin will enter the academy as a freshman.

Levin, 20 years old, is a member of Tau Epsilon Phi fraternity, ASME and the 1950 Junior Week committee.

# Slipstick artists foil burglar

Two Illinois Tech students took a time out from studies Sunday night to capture a burglar.

Leonard Carlman and Charles Lindgren, CE's, were studying in their apartment at 48 N. Lockwood, when they heard noises upstairs. Investigating, they found Sam Cohen, 61, of 22 N. Halsted, looting a bedroom. Carlman and Lindgren subdued the burglar and after a short scuffle in which Carlman was cut slightly by Cohen's knife.

# Two men named to publications board positions

The appointment of two new members to the Publications board were approved by ITSA March 1. Marks Levy and Evert Saxe were selected after screening and interviews to determine their ability and experience.

Levy has written sports for Technology News and the Integral for three semesters, while Saxe has edited the Farr Crier, dormitory newspaper. The Publications board appoints the editors of the four student publications and assists the publications in any major problems which may arise. Its job is to hear all complaints on the publications and to make suggestions to the right people to correct the situation on which there has been a complaint.

# Institute of Design will exhibit work

A 45-panel exhibition of the work done at the Institute of Design will be shown March 8-19 at the University of British Columbia, Vancouver, B. C.

The exhibit is being sent through the United States and Canada under the auspices of the American Federation of Arts.

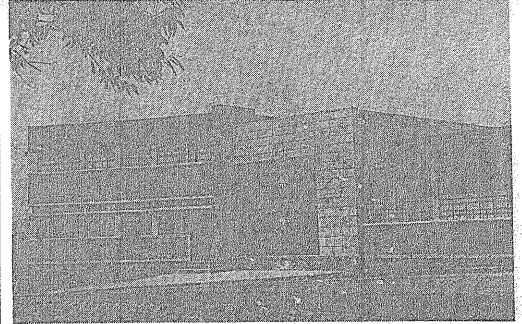
"Learning Through Doing" is the theme of the exhibition which includes 125 photographs and accompanying textual material explaining the Institute of Design's development since its founding in 1937.

The exhibit graphically explains the foundation course which all students must take before specializing, as well as the Institute's educational principles and plan of courses in related design fields.

# Industry, faculty to be featured in chem confabs

The Illinois Tech chapter of the American Chemical Society has arranged a series of talks to be given during its regular business meetings. These informative lectures, the first of which was presented at the last meeting by Francis Hayes, assistant professor of chemistry, are being delivered by professors and prominent men in industrial research positions.

G. Harvey Benham, associate professor of biochemistry, will be the featured speaker at the next meeting which is to be held on Thursday at 1 p.m. in the Chemistry auditorium. His topic will be "Frontiers in Biochemistry." Membership in the society is open to all students registered in Chemistry, Chemical Engineering, or Metallurgical Engineering. Further information may be obtained from the officers of the organization or from Dr. Eugene Lieber, chapter advisor.



# ARF research extends beyond national borders

It is highly probable that few people realize the scope of the Armour Research Foundation's operations, including not only domestic but foreign operations. Standing out among its foreign projects is the "El Plan Armour," begun seven years ago and successfully operating ever since. This plan has given technological assistance which enables nations, such as those in Latin America, to import U. S. technology with a minimum depletion of dollar reserves.

The latest step in the plan was the construction of a new laboratory building in Mexico City (picture above). This modern structure, occupying 1,500 square feet, was built by the Banco de Mexico, S.A. It is run by the Armour Research Foundation in the interests of Mexican technological development, giving Mexican enterprises the same level of scientific aid that is enjoyed by industries in the United States.

The "El Plan Armour" was brought to Mexico in 1944 at the request and sponsorship of the Banco de Mexico. Its first step was a nation-wide technological audit conducted by U. S. and Mexican scientists. ARF sent a carefully selected group of its staff who made their homes in Mexico and did

everything possible to absorb a keen understanding of the problems under study.

Then, upon specific recommendation by this group, laboratory research and developmental projects were started, some of these including the industrialization of cascolate tannin, the domestic extraction of quinine, improved methods for the production of oils for leather treatment and finishing and the development of tortilla flour.

As these technological problems were successfully solved, private Mexican industrial firms began posing a steady stream of research problems on glass, textiles, vitamins, corn products, and other items. Both the sponsoring agency and the Foundation's international division work together closely during the progress of any technical program to guide the work into the most effective channels.

The Foundation is continually helping Mexico develop its own technical facilities. At the same time Mexican engineers are being brought to the United States for additional training.

ARF conducts such programs as "El Plan Armour" on a non-profit basis. In addition, special arrangements are made to reduce operating costs and conserve dollar requirements by accepting a considerable percentage of domestic currency from countries facing a shortage of dollars.

Thus the Foundation's cooperative and economical method of attacking difficult research problems is furthering technological advance in international industry.

# Classified Ads

Cell Ext. 404

WANTED—old (1925-30) electric trains, 0 gauge, Lionel, Amer. Flyer, Ives, in any condition. Don't let old ones rust away in basement or attic. Drop list of stuff and price wanted in Tech News office.

ADMIRAL PHONO-RADIO — Walnut console \$50.00, pair new blond end tables. GR. 6-1422.

FOR SALE—2 new Supercushion tires, 6.70-15; unused, \$25.00. Call after six—VA. 6-5010.

LOST: Text book, "Administrative Law," by Walter Gellhorn. Return to Ira Rakley, VI. 2-8724.

APT. TO SHARE—Male student will share 3 room apartment, south, Call Dave Westbrook, South Shore 8-1010.

LOST—Pair brown leather fur-lined gloves. Reward. Please return Elaine Krause. EUclid 6-8948.

FOR SALE—6 x 20 green Clearfax rug with Ozite pad. Used one year. Cleaned and in perfect condition. TRiangle 4-5804 evenings.

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