

# C. I. T. NEWS

## FRIDAY EVENING DEMONSTRATION LECTURES RESUMED

**R**ADAR," a lecture by President Lee A. DuBridge on Friday, October 18, resumed weekly Friday evening demonstration lectures discontinued during the war.

The current series of lectures is entitled "Important War-Time Scientific Developments—Their Social Implications and Peace-Time Applications." Besides radar; rockets, jet propulsion, atomic fission, chemical warfare, medical and chemical developments will be discussed. The present series will probably be continued through the end of the year.

Next three lectures scheduled are "Microwave Phenomena" by Dr. Pickering, "Artillery Rockets" by Dr. Thomas Lauritsen, and "High Altitude Rockets" by H. S. Seifert.

These and other events are listed in the California Institute of Technology Weekly Calendar, published every Friday of the academic year except during vacations. The Calendar will be sent without charge upon application to Miss Leonora S. Reno, 201 Mudd Laboratory.

## FALL ATHLETICS

### Football

**F**OOTBALL practice, which started a week before school opened with 30 men out, is now in full swing with 50 men showing up for practice. New on the practice field is line coach Pete Mehringer, all-conference tackle from Kansas, who has also seen considerable professional experience.

Conference rules are being relaxed for the 1946 season, permitting freshmen and transfers to play varsity ball. Also, graduates who, under the accelerated program, did not get three seasons of competition, may play this season. This ruling will render several graduate students at the Institute eligible for another year of competition.

A practice game with La Verne College, October 19, will start the season. Since daylight saving time is a thing of the past, floodlights on the field have proved necessary for late afternoon practice, besides giving experience for the four night games scheduled this year.

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### Cross-country

About to start under the guidance of "Doc" Hanes is cross-country, fall minor sport in which C.I.T. has long received more than her proportion of honors. Runs are scheduled with U.C.L.A., Occidental, and Pomona College for November and December. The season will end December 7 with the conference run on the Rose Bowl course.

### Tennis

John Lamb, who coached varsity tennis last spring, is again on the athletic staff. Until the regular season practice commences, Lamb will instruct tennis classes.

### Water Polo

Again coached by Bob Merrick '41, the water polo team is practicing nightly in the Pasadena Junior College pool preparatory to meets with Occidental, U.C.L.A., and Compton Junior College.

### Intramural Athletics

Starting on October 21 with softball, interhouse athletics will give many men the opportunity to work up a sweat and offer prognosticators a chance to see if the old superiorities of certain student houses prevail.

### FOOTBALL SCHEDULE 1946

October 25	*Occidental	at Rose Bowl
November 2	*Whittier	at Whittier
November 8	*Redlands	at Rose Bowl
November 16	Pomona	at Claremont
November 23	*Pepperdine	at Inglewood
	*Night Games	

This year the intramural athletics will, when possible, be scheduled before the varsity sport, to permit the coaches to scout for latent talent.

Basketball will be run off, starting November 15, giving Coach Carl Shy a chance to organize his squad for practice during December. Varsity basketball will start its league schedule in January.

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## Y. M. C. A. FORUM SERIES

COMMENCING on Monday, October 28 with a talk by Mr. Harry Flannery, C.B.S. correspondent, "Eyes Front in a Cockeyed World," the Y.M.C.A. is, under the direction of executive secretary Wesley L. Hershey, sponsoring a series of Monday Evening Forums on World Affairs. Except for the first talk, which will start at 8:00, the meetings will begin at 7:30 in room 119 Kerkhoff. These gatherings are open to the general public.

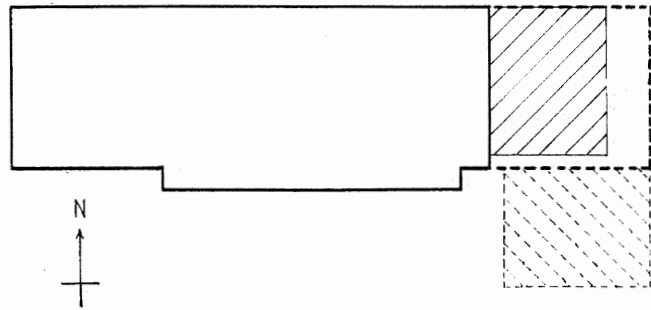
Other topics will be "China: America's Number One Problem in Asia" by Professor Allen B. Cole, Department of Far Eastern Affairs, Pomona College; "Great Britain: 1946 Model" by Professor Charles M. Mowatt, Department of English History, U.C.L.A.; "How to Worry About Russia" by Professor John Vieg, Department of Government, Pomona College; and "United States Policies in World Prosperity" by Professor Cecil Dunn, Department of Economics, Occidental College.

### GUGGENHEIM ENLARGED FOR HYPERSONIC WIND TUNNEL

NOW under construction is a reinforced concrete addition to Guggenheim Aeronautics Laboratory, which will house a hypersonic wind tunnel, probably the first in the world. The two story wood and plaster structure that was added to the east end of Guggenheim in 1940 and 1942 has been detached. This was originally built to house a 300,000 pound testing machine and a small wind tunnel. Holes were cut through the building just below the window sills, and beams were inserted under the basic frame members. Moved south and turned 90 degrees, this addition is still supported by its window sills, but will be attached to the south wall of the new wing when it is completed.

The new wing will comprise three stories above the ground, and two basements. The hypersonic tunnel will be housed in the two basement floors. Necessary compressors and machinery for operation will be installed in the second basement. Six motors and compressors, totalling 1500 horsepower, obtained from the Kaiser shell plant in Fontana will comprise the power plant for the system.

Not only is the tunnel planned for testing models of projectiles, but it will also be a proving ground for wind tunnel theory. The hypersonic tunnel will produce air speeds of from five to 10 times the



Daniel Guggenheim Aeronautics Laboratory. Broken lines indicate new constructions and rearrangement. Cross hatching shows two-story wooden structure.

speed of sound. Heretofore four times the speed of sound has been the highest velocity obtained. The "hyper" prefix is arbitrarily given to speeds greater than four times the speed of sound.

Government property, the tunnel will be installed to assist in the guided missile research being done at the Institute. Expected to be operating by the end of 1947, tunnel construction will get under way as soon as the two basements are completed, probably early next spring.

### EUCALYPTUS TREES BEHEADED

EUCALYPTUS trees planted in two blocks between Bridge and Crellin laboratories have recently suffered the loss of one-third of their height. This is not, as was at first feared, a preparatory step toward their removal. Superintendent of Buildings and Grounds, Wesley Hertenstein '25, assures that within two to three months the trees will put out considerable new growth. Also, in their shortened state, the trees will be less susceptible to damage from spring winds.

### LACEY AWARDED CITATION

DR. W. N. LACEY, professor of chemical engineering, and author of nearly 80 scientific articles on physical and chemical properties of hydrocarbons, was awarded the Hanlon Award for meritorious service to the natural gasoline industry for 1946. His citation was received in absentia by Dr. Lacey, who was represented by M. L. Arnold, president of the California Natural Gasoline Association, Los Angeles.

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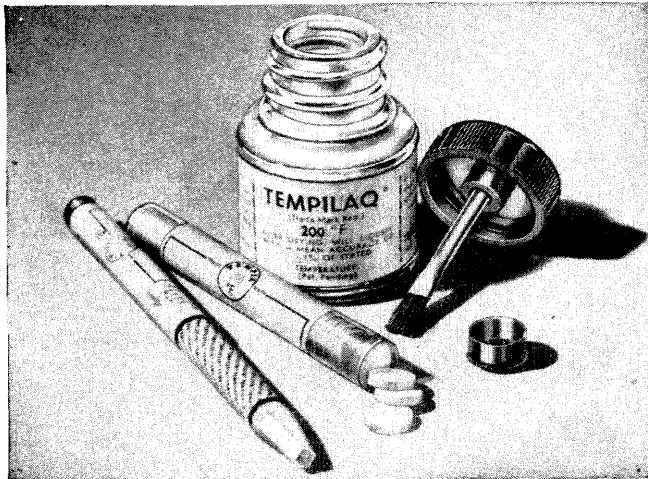
## MICROBURET DEVELOPED BY INSTITUTE CHEMISTS

**A** DURABLE syringe-type microburet for measuring minute volumes of liquids was developed by Institute chemists during the war; one result of a research program sponsored by the Office of Scientific Research and Development to find suitable apparatus for laboratory and field analysis of chemical warfare agents.

The apparatus consists of a syringe holder equipped with a precision micrometer movement. A glass hypodermic syringe is clamped in the holder, and fluids are discharged by turning a graduated micrometer knob. The maximum delivery of the instrument is approximately two cubic centimeters. The volume may be read to one microliter, and selected syringes afford a precision of one- or two-tenths per cent.

## WOMEN WIN THROOP CLUB TIFF

**A**T A MEETING early in October, the men of Throop Club decided that a woman's membership in Throop Club Wives, the auxiliary organization, did not obligate her husband to be a member of Throop Club. This settled, the next decision for the men is that of choosing between samples of upholstery fabric collected by the women preparatory to re-covering the Club's furniture.



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## Freshman Camp, 1946

(continued from page 15)

diversion. Mountain golf, played up and down hill with croquet-like equipment occasionally broke up other sports as golfers dashed madly after a ball which had missed the green.

Climax to athletic activity came Sunday morning in weather permitting stripping down to only two layers of clothing. A faculty team sparked by Harry Lass, mathematics teaching fellow, in the pitcher's box, and Chuck Auerbach, resident associate of Dabney, who alternated between first and home with Dr. Sterling, held the frosh to a 5-5 tie. Dr. DuBridges, playing second base, and batting well over .300, confounded young cameramen who had three or four lenses trained on him much of the time, when, after getting to first on a clean single, moved to second, and then ran for home when the next batter doubled. After the dust cleared and the president was pronounced safe, cameramen of frosh, soph, junior, senior and graduate standing found that they had failed one and all to get pictures of the event.

## CORRECTION

**I**T WAS stated in the August issue of *Engineering and Science* that "Russel J. Love Heads Research Committee." Mr. Love wishes to correct this statement. The actual head of the Pressure Vessel Research Committee is Mr. Walter Samans of the Sun Oil Company, chairman. Mr. Love is secretary of the committee, and in charge of the office.



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