

Architect's drawing of the new Caltech gymnasium and swimming pool

THE MONTH AT CALTECH

Gym and Pool

PRELIMINARY PLANS for the new gymnasium and swimming pool on the campus have now been completed and contract drawings for bids are being prepared. Construction should get under way soon after the first of the year, and the unit will be ready for use by the beginning of the next school year.

Construction details of the Alumni Swimming Pool were first announced last spring (*E&S*—March, 1953) when contributions to the Caltech Alumni Fund approached the \$150,000 goal. Soon after this announcement, however, a \$400,000 fund, made available through a bequest of the late Scott Brown, was allocated by the Institute Board of Trustees to the construction of a new gymnasium. Plans were then reformulated for a gym-swimming pool combination.

The new buildings will go up at the south end of the Tournament Park parking lot. The gym will be on the east, athletic offices and locker rooms in the center, and the pool on the west.

The gym will be approximately 132 ft.x96 ft., with a floor 114 ft.x94 ft. Seating capacity for varsity basketball games will be 1,000. With bleachers folded, two 44 ft.x80 ft. courts will be available for practice.

The pool, as originally planned, will be L-shaped, with a relatively shallow 75 ft.x42 ft. section for racing and a deeper 40 ft.x60 ft. section for diving and water polo. The pool will be heated and lighted for night swimming, and will be open to the air, with a fenced windbreak.

There will be a locker room for students, with 650 lockers and shower facilities. Visiting teams, faculty and graduate students, and coaches will each have separate locker rooms. Other rooms include seven offices, a lecture room, a stock room, two large equipment rooms and two smaller ones for pool and field equipment, a drying room and a medical room.

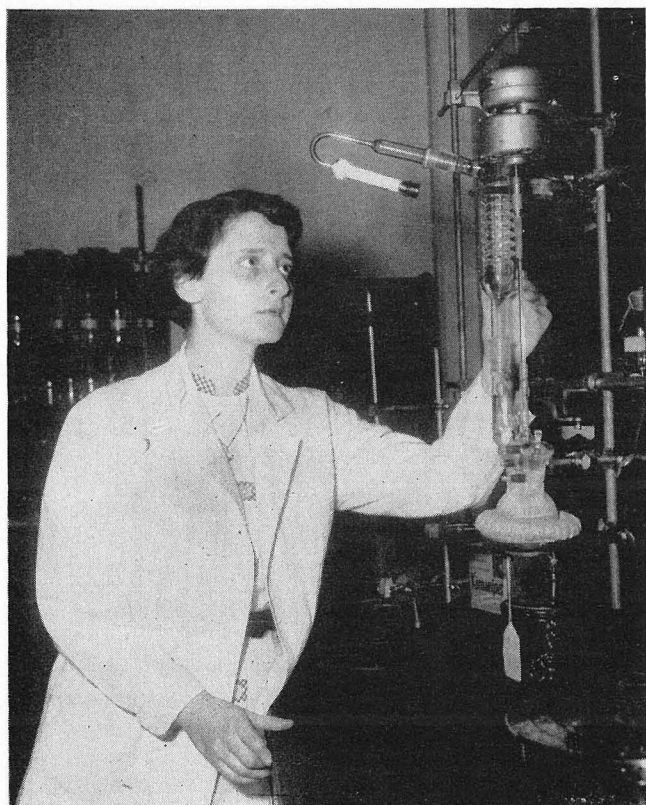
Pioneer

CALTECH QUIETLY ACCEPTED its first woman graduate student this fall when Miss Dorothy Ann Semenov signed in to work here toward a Ph.D. degree in chemistry.

Miss Semenov owes her presence on the campus to a recent action of the Caltech faculty and the Board of Trustees, admitting women to graduate study at the Institute. This gallant action is not, however, an open invitation to the ladies. It applies only to "women of exceptional ability who give promise of great scientific contributions." And, before she can enroll, a woman must get the approval of the academic division in which she intends to work, as well as that of the Committee on Graduate Study.

With such hurdles as these, it is hardly likely that the campus will ever be swarming with female students. Most admissions of women, in fact, will probably involve the use of unique or outstanding research facilities here.

The Institute, founded in 1891 as Throop University and later named Throop Polytechnic Institute, was co-educational in its early years. It offered secondary and



Dorothy Semenow, graduate student in chemistry, is the first woman candidate for a Caltech degree.

college-level training in vocational arts, and had a department of domestic science as well as a normal school for teacher training. After the school moved to the present campus in 1910 most of these courses were discontinued, and engineering and science became the core of a college curriculum limited to men.

Miss Semenow is the first woman candidate for a degree since that time. She was graduated *summa cum laude* from Mount Holyoke College in Massachusetts in 1951. She received an American Chemical Society Student Membership Award in 1950 and in 1951 she was elected to Phi Beta Kappa.

After graduation she continued her work in chemistry as a teaching assistant at Mount Holyoke, and in 1952 became a graduate student and teaching assistant at MIT. She worked there under the direction of Professor John D. Roberts, who was appointed Professor of Organic Chemistry at Caltech this fall.

As a matter of fact the Roberts appointment here is directly responsible for the Institute's ruling admitting women graduate students. When Dr. Roberts accepted his Caltech position, Miss Semenow asked to be transferred here with him to continue her research. It took a change in Institute policy to grant her request.

She is at Caltech on a Skinner Fellowship in Chemistry, sponsored by Mount Holyoke College. Her present research is in the field of theoretical organic chemistry.



Time was when women students were no rarity on the campus—as witness this picture of frantic activity in the cooking room of the old Throop Polytechnic Institute, sometime early in the century.

MIT Conference

PRESIDENT DUBRIDGE and twelve Institute staff members met with members of the Academic Council of the Massachusetts Institute of Technology in Cambridge, Mass., last month, from October 12 to 14, to discuss mutual educational problems.

The meeting was a continuation of a highly successful three-day conference held at Caltech last March, when the MIT group visited here. The Cambridge discussions covered such things as general educational philosophy and objectives, improvement of undergraduate education, admission problems, sponsored research, and graduate study and research.

These meetings have occasioned a good deal of interest in academic circles, since this seems to be the first time two rival institutions have made a cooperative effort to work on common problems.

Knight Commander

CHARLES C. LAURITSEN, Professor of Physics, has been made a Knight Commander of the Danish Order of Dannebrog, one of the oldest in the world.

The honor was conferred by King Frederik IX of Denmark for Dr. Lauritsen's wartime services with the National Defense Research Committee and the Office of Scientific Research and Development in Washington and at Caltech, where he was technical director of the Caltech rocket project. Dr. Lauritsen's war work had previously been recognized with the U. S. Medal for Merit as well as certificates of appreciation from the U. S. Navy Bureau of Ordnance and the U. S. Army.

The Order of Dannebrog was created in 1219, during the crusade of King Valdemar, when the Danes defeated the Russians in a critical battle at Riga. The decoration

is conferred on persons who perform meritorious services for Denmark or on native Danes living abroad who have made outstanding contributions in diplomacy or science or in the armed services.

Professor Lauritsen, whose major field of investigation in nuclear physics has been the energy levels of light nuclei, has been a member of the Caltech faculty since 1930. A native of Denmark, where he received his undergraduate education, he was awarded the Ph.D. degree at Caltech in 1929.

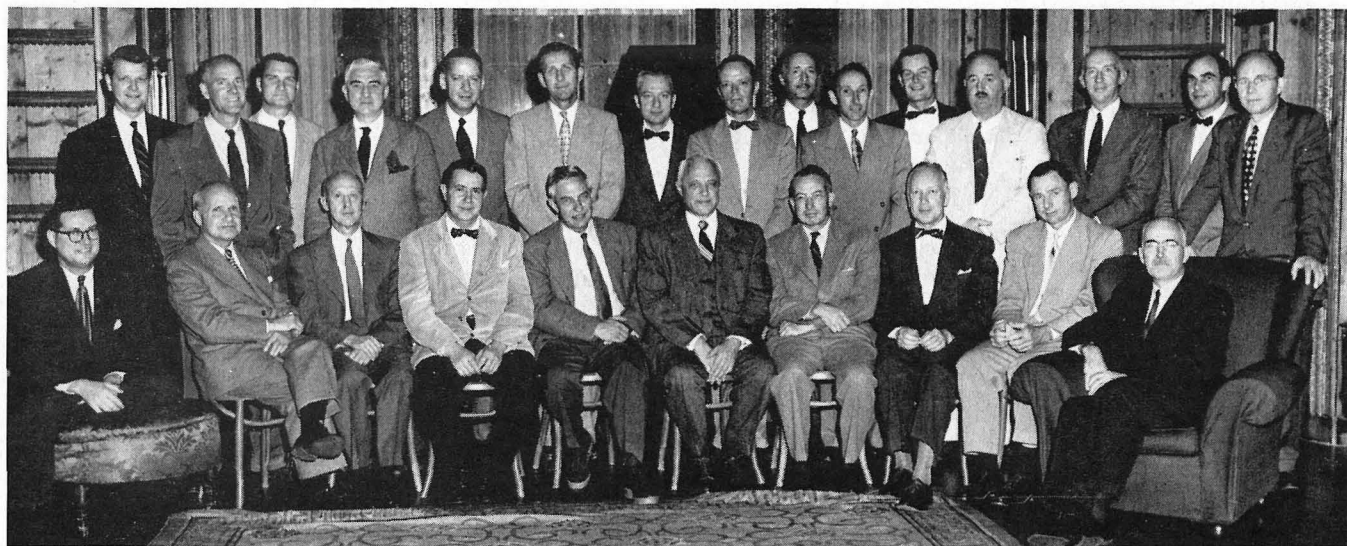
DeMille Lecturer

DR. DONALD S. CLARK, Professor of Mechanical Engineering at the Institute, delivered the Edward DeMille Campbell Memorial Lecture before the national congress of the American Society for Metals in Cleveland, Ohio, on October 21.

The lectureship, established in 1925, annually features an outstanding worker in metals research and is one of the highest honors conferred by the Society. Professor Clark, whose major fields of research have been physical metallurgy and the dynamic properties of metals, spoke on "The Behavior of Metals under Dynamic Loading."

He is a former national trustee of the Society and has received the Charles B. Dudley Medal and the Richard L. Templin Award of the American Society for Testing Materials.

Dr. Clark has been a member of the Institute staff since he received the Ph.D. degree in 1934, and is Institute Director of Placements as well as secretary of the Alumni Association. He is the co-author of two books, *Engineering Materials and Processes* and *Physical Metallurgy for Engineers*.



MIT and Caltech conferees in Massachusetts. Standing: Kispert, Beadle, Snyder, Brooks, Farnsworth, Green, Hazen, Smith, Belluschi, Weir, Bowditch, Robertson, Thresher, Hurley, Edgerton. Sitting: Gilliland, Watson, Lacey, Killian, Dubridge, Compton, Bacher, Stratton, Sharp, Harrison. Missing: Jones, Lindvall, Webb.