ALLEN LEE LAWS '26

CHARLES W. VARNEY, JR. '22

ALLEN LEE LAWS SUCCEEDS CHARLES VARNEY AS PRESIDENT

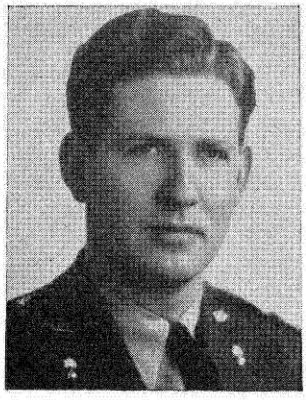
THE C.I.T. Alumni Association has attained its thirty-first birthday, and in entering its thirty-second year, the policies and activities of the organization will be guided by Allen Lee Laws, '26, of the Southern California Edison Company.

Born in New Jersey in 1903, Allen came to California in 1917. He attended Chaffey Union High School in Ontario, California. His choice of C.I.T. as alma mater was conditioned by a combination of an incurable interest in things electrical, and the impassioned salesmanship of a Chaffey Union mathematics professor who argued, with justice, that the Institute had rich rewards to offer her scholars. At Tech, Allen was a member of the "Pharos", an A.I.E.E., and a member of the track team. His connection with the Southern California Edison Company began while he was still an undergraduate; he started work with Edison in June, 1923, as a substitute operator and worked nights until graduation in 1926. After completing Edison's student engineering course he entered the valuation department. From 1929 to 1933 he was engaged in industrial sales for the company. Advancements since that time have made him successively assistant to new business manager in the main office of the company and district manager of the Vernon office. Recently he has been made assistant commercial manager for the Edison Company and has moved his business office from Vernon to the main office of the company in Los Angeles.

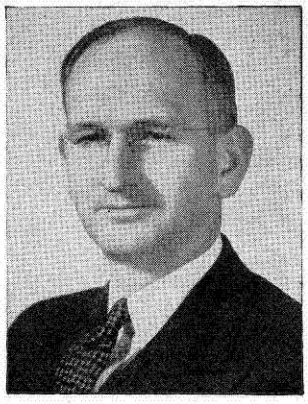
Allen's civic and business activities include membership in the San Marino City Club, the Los Angeles Electric Club, the Pacific Coast Electrical Association, Rotary, and Pharo Fraternity, and work for the San Marino Cub Scouts.

The year that Allen received his degree in Electrical Engineering from the Institute was one in which the editors of the Big T attempted to characterize the members of the senior class with appropriate or semi-appropriate adjectives. The one beneath Allen's senior portrait is "impeccable." Although we are willing to admit that Allen is undoubtedly free from sin or as faultless as most C.I.T. graduates, we feel that the somewhat negative praise of "impeccable" is totally inadequate in describing Allen Laws. We who have worked with him in the Alumni Association admire him for his clear, cool-headed thinking, and his willingness to undertake, organize, and carry through, difficult and thankless tasks. We're sure that during his term as president of the Association, our stature as an association will reach a new high.

In assuming the presidency of the Association, Allen Laws succeeds Charles W. Varney Jr., '22. Chuck Varney had the misfortune, or the good fortune, depending on point of view, to head the Alumni Association in a period when it suffered serious growing pains and the onslaught of inflation. The story of the 1945-46 year rightfully belongs to him, and we hope to have the privilege of printing his annual report in our next issue. In spite of the growing pains within the Association, Chuck Varney's administration was an outstanding success. Interest in the activities of the association was keen and the program well organized and well executed. Fortunately for the Alumni Association, Chuck's service will not end with his retirement from the presidency, as he has been elected to serve for another year on the '46-'47 board of directors and will then become a member of the Past Presidents group.



James R. Bradburn '32



W. M. Jacobs '28

Fred T. Schell '27

Howard B. Lewis '23

At present, Charles Varney is manager of the Alhambra Business Men's Association. He was born in Anaconda, Montana, and was graduated from San Diego High School in 1917. He received his B.S. degree in Engineering and Economics from C.I.T. in 1922, and was with the Southern California Edison Company from 1922 to 1935. He was manager of the Alhambra City Commission from 1942 to 1944. While an undergraduate at C.I.T., Chuck was a member of the Gnome Club and the Press Club. His undergraduate activities included the Tech Staff of which he was successively business manager and editor, advertising manager of the Annual Staff, Board of Control, and, believe it or not, the Mandolin Club.

PRESENTING NEW ALUMNI BOARD MEMBERS

FOUR new members have been elected to serve two-year terms on the board of directors of the C.I.T. Alumni Association. The four whose terms will begin in July, 1946, are: James R. Bradburn, '32, W. M. Jacobs, '28, Fred T. Schell, '27, and Howard B. Lewis, '23. We doubt if any of the new board members need an introduction to the Institute audience but in order to bring history up to date, here is an outline on the four new men who will help guide alumni affairs for the next two years.

James R. Bradburn, '32, prepared for the hectic problems of life in the atomic age by specializing in track, and by making Tau Beta Pi. This same combination of speed and brains won him a host of other undergraduate honors. He was active in the Press Club, the Associated Student Body, the Throopers, A.I.E.E., and in the affairs of Ricketts House. He served on the Exhibit Day Committee in his junior and senior years, and was chairman of the Junior-Senior Prom Committee in his senior year. He was also a member of the track and cross-country teams, as well as of the staff of the Big T and the Tech. The above list explains how he became an Honor Key man, but fails to explain how he had time left over to make Tau Beta. He received his B.S. in Electrical Engineering in '32.

Jim's present position is that of vice president and director of Consolidated Engineering Corporation of Pasadena. He is in charge of Consolidated's commercial engineering department. Prior to joining Consolidated Engineering in November, 1945, he spent five years in the United States Army Ordnance Department, reaching the rank of major. For the last two and one-half years of his Army career, Jim was Chief of the Artillery Division, Rochester Ordnance District. His other business experience included several years with General Electric Company and Eastman Kodak. He also spent two years at the Harvard School of Business Administration, where he received a degree of Master of Business Administration.

W. M. Jacobs, '28, received his B.S. degree in Mechanical Engineering. As an undergraduate, Mort Jacobs was a member of the "Pharos" and vice president of his senior class. He was also active on the Tech staff and in the Throopers, A.S.M.E., Delta Mu Beta, and the Geology Club.

Mort's undergraduate interest in organizations and community service has expanded and continued in his business and social life. He is active in the Pacific Gas Association, of which he has been chairman of the sales and advertising section, and is currently a member of the American Gas Association's promotional committee and national advertising committees. He is also a member of the Los Angeles Athletic Club, Masonic Lodge, Sales Managers Association of Los Angeles, Lions Club, Los Angeles and California State Chamber of Commerce, and president of Rancho Santa Anita Property Owners' Association, Arcadia.

After graduation from C.I.T., Mort did design engineering work in the field of industrial equipment and power plant design for Collins Western Corporation of Los Angeles. In 1930 he entered the Southern California Gas Company where he has been successively industrial service engineer, industrial sales engineer, rate application engineer, and general sales supervisor. At present he is manager of general sales.

Fred T. Schell, '27, varied the pattern of board member undergraduate activity by displaying a marked interest in music. As a member of the Caltech Band and Chorus, he made, we're sure, a harmonious addition to the student body. A harmonious worker as well as musician, Fred was drafted for the Alumni Board because of his excellent work in assisting Allen Laws on the Association Program Committee in 1945-46. At Tech he was a member of Sigma Alpha Pi and Pi Kappa Sigma Military Fraternity.

Upon graduation, Fred entered the employ of the Southern California Edison Company. After completing a preliminary course of training with that company, he was assigned to the industrial sales department and later was employed as assistant commercial engineer in the company's Los Angeles office. In 1939 he again entered industrial sales work until May of 1944, when he was loaned to Columbia University's Division of War Research at New London, Connecticut. While with Columbia University he was assigned to duty with the Bureau

of Ships, and engaged in research and engineering work allied with the Navy's submarine program.

Fred returned to Edison as assistant manager of industrial sales after completion of his project at Columbia University in July of 1945. Recently he has been appointed district manager of the Edison Company's Compton district.

Howard B. Lewis, '23, entered C.I.T. in 1918, when the Institute was still the Throop College of Technology. Due to the loss of a term in his junior year with eye difficulties, he received his B.S. degree "in absentia" in 1923. He taught and studied at Cornell the following year and acquired an M.E. degree from Cornell in 1924.

After a year of teaching physics at Riverside High School, he spent six years with Howard Hughes as an experimental engineer, manager of the Hughes Development Company, and general manager and assistant to the president of Multicolor, Ltd., a production laboratory for the processing of colored and black and white motion picture film. These operations were drastically curtailed when the crash came and Howard Lewis found himself out in the cold world in the bottom of the depression. From this unhappy position he started a ten-year program of the development and proof of a philosophy and formula under which an engineer, or group of engineers, could maintain a reasonable degree of independence of action, and obtain and retain a fair proportion of the earnings resulting from the work done.

Work, worry, and luck brought sufficient success and security to justify expansion, and in 1940 Howard Lewis and Glen M. Larson formed the Lewis-Larson Company. They bought a building at 5959 South Hoover Street, Los Angeles, and remodeled and equipped it to serve as offices, laboratories, and experimental shops for twelve to fifteen men. There they gathered a group of men of varied talents able to do justice to almost any problem in the fields of mechanical, electrical, or chemical engineering not involving the expenditure of great blocks of manpower. The efforts of the Lewis-Larson Company have been devoted primarily to the service of the smaller business which needs high grade engineering services, but insufficient quantities of such service to justify maintenance of an adequate engineering staff of its own.

A REFRIGERATED ALTITUDE CHAMBER

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borhood of —100°F. and +200°F., with gratifying results as to uniformity throughout the chamber and constancy over the time periods involved.

Cost figures for this installation may be of interest to some readers. The basic chamber and operating equipment cost about $60,000, excluding engineering design time. The complete installation, including those accessories (such as the controlled air source) which are required for special tests, and also including design costs, represents an investment of about $75,000. A continuous and substantial backlog of items awaiting tests is convincing evidence of the usefulness of this equipment.

RECEIVES WILLARD GIBBS MEDAL

DR. LINUS C. Pauling, chairman of the California Institute of Technology chemistry division, and noted for his work on molecular structures, will receive the nation's highest award for progress in chemistry, the 35th annual Willard Gibbs Medal of the American Chemical Society, the society announced June 4.

C. I. T. NEWS

SUPERSONIC WIND TUNNEL

CALIFORNIA INSTITUTE OF TECHNOLOGY has just been granted priority approval by the Civilian Production Administration to erect a $150,000 addition to the aeronautics laboratory of the Guggenheim Graduate School. Housing a hypersonic wind tunnel which will be used for studies of projectiles at higher-than-sound speeds, the five-story structure will also contain classrooms for Army and Navy officers training in the special laboratory. Equipment valued at $90,000 will be installed in the building.

It will be recalled that the Cooperative Wind Tunnel has operating conditions to cover speeds up to the velocity of sound. A $2,500,000 project, financed and owned by four southern California aircraft companies—Consolidated Vultee Aircraft Corporation, Douglas Aircraft Company, Inc., Lockheed Aircraft Corporation, and North American Aviation, Inc.—the Cooperative Wind Tunnel is operated by the California Institute of Technology, and dedicated to the development of aeronautical science in war and peace, in the hope that America will always retain her leadership in the air.

ATHLETICS

By H. Z. MUSSELMAN

Director of Physical Education

ALL the spring sport teams, Track, Baseball, Tennis, and Swimming, experienced a very mediocre season, with victories few and far between. No contests in any of the four sports were won from Southern Conference opponents.

In contrast to the past three years, the 1946 teams were composed almost entirely of inexperienced material, most of which was about one year removed from varsity standards. On the whole, the Caltech teams were a little below pre-war standard, while our opponents, finding a greater response from former service men, were somewhat stronger than normal.

Coach Mason Anderson held a six-week spring football practice with thirty-five men reporting. At present, only one letterman from last year's team, Don Hibbard, end, is in school. However, about six lettermen who played on the 1944 and 1945 teams expect to be separated from the Service this summer, and are planning to enroll at the Institute this fall. Their return will greatly brighten the 1946 football outlook.

INVENTOR OF SYNCHOTRON

A NEW atom-smasher called the synchotron three times as powerful as the betatron, the next largest atom-smasher, is scheduled for completion at the University of California early next year, according to an announcement received from that institution.

The synchotron was invented by Dr. Edwin M. McMillan, one of the co-discoverers of neptunium, element 93, used in the manufacture of the atomic bomb. Dr. McMillan received his B. S. degree in 1928 and his M. S. in 1929 from the California Institute of Technology. As an undergraduate at C. I. T., Dr. McMillan took an active