

Commencement

CALIFORNIA INSTITUTE OF TECHNOLOGY

PASADENA

June 10, 1938, 4:45 o'clock

PROCESSIONAL MARCH—

Victoria Marche

The Institute Band

Cancell

Invocation and Chaplain's Address

RT. REV. W. BERTRAND STEVENS

Address

"EXPERIMENT AND EXPERIENCE"

EDWIN HUBBLE, Ph.D., Sc.D.

Presentation of Candidates for Degrees

FREDERIC W. HINRICHS, JR., M.A.

Dean of Upper Classmen

ERNEST HAYWOOD SWIFT, Ph.D.

Member of Committee on Course in Science

ROBERT L. DAUGHERTY, M.E.

Member of Committee on Course in Engineering

RICHARD CHACE TOLMAN, Ph.D.

Dean of the Graduate School

Conferring of Degrees

on behalf of the Trustees and Faculty

ROBERT ANDREWS MILLIKAN, Ph.D., LL.D., Sc. D.

Chairman of the Executive Council

The Progress of the Institute

DR. MILLIKAN

Benediction

(The audience will stand for the Academic Procession and the Invocation).

Candidates for Degrees

Doctor of Philosophy

RALPH DORIS BAKER, B.S., University of Utah; M.S., University of Kansas
ROBERT DeVORE BOCHE, B.S., California Institute
EUGENE MITTELL BRUNNER, B.S., and M.S., California Institute
ALEXANDER CRANE CHARTERS, JR., B.S., and M.S., California Institute
WILLIAM CECIL COOPER, B.S., University of Maryland; M.S., California Institute
KAMAL DJANAB, Licencie, University of Teheran; Certificat d'Etudes Superieure, University of Nancy;
Licencie es Sciences, University of Paris
EDWARD BUSHNELL DOLL, B.S., and M. S., California Institute
NORMAN ELLIOTT, B.A., and M.A., Oberlin College
EUGENE HENDERSON EYSTER, B.Ch., University of Minnesota
CLIFFORD SYMES GARNER, B.S., California Institute
NEWMAN ARNOLD HALL, A.B., Marietta College
HSIA-CHIEN HUANG, B.S., National Central University; M.S., California Institute
PHILIP TRUMAN IVES, B.A., and M.A., Amherst College
EDWIN NICHOLS LASSETTTE, B.S., Montana State College
HENRI ARTHUR LEVY, B.S., California Institute
ELBURT FRANKLIN OSBORN, B.A., De Pauw University; M.S., Northwestern University
DARRELL WAYNE OSBORNE, A.B., University of California at Los Angeles
KENNETH JAMES PALMER, B.S., University of California
LOUIS TELEMACHUS RADER, B.A.Sc., University of British Columbia; M.S., California Institute
VERNER SCHOMAKER, B.S., and M.S., University of Nebraska
WILLIAM REES SEARS, B.Aero.E., University of Minnesota
HOWARD STANLEY SEIFERT, B.S., and M.S., Carnegie Institute
WILLIAM EDWARDS STEPHENS, A.B., and M.S., Washington University
DONALD STINSON TAYLOR, B.A., Linfield College
SAUL WINSTEIN, A.B., and M.A., University of California at Los Angeles

Master of Science in Science

PHYSICS

LEVERETT DAVIS, JR., B.S., Oregon State College
RICHARD ROHRER GOODELL, B.S., California Institute
STEPHEN JENNINGS, B.S., Trinity College
ULRICH JETTER, Diploma, Technische Hochschule, Stuttgart
HOWARD HOLLIS REAMER, A.B., University of Redlands
CHARLES FRANKLIN ROBINSON, B.S., Drury College; A.B., Missouri State Teachers College
CHARLES WILCOX SHEPPARD, B.S., California Institute
MEYER JOSEPH TEST, B.S., California Institute
JOHN SHEARON WIGGINS, A.B., Earlham College

CHEMISTRY

JOSEPH AXELROD, B.S., California Institute
JOHN BURTON HATCHER, B.S., California Institute

CHEMICAL ENGINEERING

HARRY DEAN EVANS, B.S., University of Illinois
DONALD CHARLES NELLIS, B.S., California Institute
CECIL WRIGHT NYSEWANDER, B.S., University of Illinois
WILLIAM DICKINSON YALE, B.S., California Institute

GEOLOGICAL SCIENCES

PAUL CARRINGTON HENSHAW, A.B., Harvard College
STANLEY WILLIAM LOHMAN, B.S., California Institute
JAMES McPHAIL ORR, B.S., University of British Columbia
MAURICE SKLAR, B.S., California Institute
JOHN CAWSE WELLS, B.S., University of Idaho

BIOLOGY

WILLARD LEE McRARY, B.S., California Institute
DANIEL CHAPIN PEASE, B.A., Yale University

Master of Science in Engineering

ELECTRICAL ENGINEERING

ALLAN KALLAN ALSAKER, B.S., Northwestern University
EDWARD MARKHAM GARDNER, B.S., University of London
CHARLES FREDERICK GATES, B.S., California Institute
ARNULFO GUTIERREZ y GOMEZ, B.S., Facultad Nacional de Ingenieria
CHARLES FRANKLIN HADLEY, B.S., California Institute
JASPER RIDGELY LEGGETT, B.S., California Institute
CHARLES WILLIAM MCLEISH, B.S., Sc., University of British Columbia
ROBERT CHARLES McMASTER, B.S., Carnegie Institute
BRUCE FITZGERALD MORGAN, B.S., California Institute
JAMES KNEELAND NUNAN, B.S., University of Southern California

MECHANICAL ENGINEERING

LEE ARNOLD, B.A., Duke University
IRVING LOUIS ASHIKENAS, B.S., California Institute
WALDO MILTON CLAFLIN, B.S.E., Princeton University
NORMAN BRANSON DEWEES, B.S., California Institute
DUANE WESLEY FARNHAM, B.S., United States Naval Academy
I. STANLEY FEUER, B.S., California Institute
FREDERIC THEODORE FUETSCH, B.S., University of Nevada
WILLIS GEORGE GESELBRACHT, B.S., Washington University
MARVIN HENDERSON GREENWOOD, B.S., Rice Institute
EDWARD JAMES HORKEY, B.S., California Institute
ALBERT HALL HUGHEY, B.S., Purdue University
SUNAO KANEMITSU, B.S., University of California
WALTER LOUIS KOCH, Diploma, Technische Hochschule, Hannover
PETER RUDOLF KYROPOULOS, Diploma, Kaiser Wilhelm II, Realgymnasium, Göttingen
DONALD CAMPBELL MacPHAIL, B.A.Sc., University of British Columbia
GEORGE EDWARD MANN, JR., B.S., California Institute
ROBERT ALFRED McINTYRE, B.S., California Institute
NOBLE NOJIMA, B.S., California Institute
JOHN BERTRAND PARRISH, JR., B.S., Princeton University
ROBERT BEATON SMITH, B.A., Ohio State University
WILBUR FISHER SNELLING, B.S., California Institute
ROBERT DAWSON TOWNSEND, JR., B.S., California Institute
CHI-CHENG TSAO, California Institute
GEORGE YOSHIO TSUBOTA, B.S., California Institute
JAY BOREAS VAN DER WERFF, B.S., California Institute
SYLVAN BROOKS WALTON, B.S., University of Southern California
TSUN-KUEI WANG, B.S., National University of Peking
JOSEPH FULTON WARE, JR., B.S., Virginia Polytechnic Institute
EDWARD EARL WILEMAN, B.S., California Institute

CIVIL ENGINEERING

JOHN ARTHUR BONELL, B.S., South Dakota State College of Agriculture and Mechanical Arts
LeVAN GRIFFIS, B.S., California Institute
WALTER LEON MOORE, B.S., California Institute
CHARLES ADELBERT MORSE, II, B.S., California Institute
DANIEL ALEXANDER OKUN, B.S., Cooper Union Institute
HSIH-HENG WANG, B.S., Harbin Polytechnic Institute

AERONAUTICAL ENGINEERING

WILLARD NEWTON BELL, B.A., University of Texas; M.S. in ME, California Institute
IRVING BERLER, B.S., New York University; M.S., in ME, California Institute
WILLIAM HAROLD BOWEN, B.S., University of California; M.S. in ME, California Institute
JOHN KENNETH BUSSEY, B.S., University of California; M.S. in ME, California Institute
WESLEY THEODORE BUTTERWORTH, B.S., Northwestern University; M.S. in ME, California Institute
LOUIS GERHARDUS DUNN, B.S., and M.S. in ME, California Institute
JOHN CHRISTOPHER DYKES, B.A., Cambridge University; M.S. in ME, California Institute
SAMUEL SLOAN JACK, Captain U.S. Marine Corps, B.S., United States Naval Academy
HISAYUKI KURIHARA, B.S., and M.S. in ME, California Institute
WALLACE BRISTOL MECHLING, Lieut. U.S.N., B.S., United States Naval Academy
GEORGE ROLLAND MELLINGER, B.A., Drake University; M.S. in ME, California Institute
JOHN LLOYD NOLLAN, B.S., and M.S. in ME, California Institute
DONALD LEANDER PUTT, First Lieut. U.S.A., B.S., Carnegie Institute
WILLIAM ALTON SCHOECH, Lieut. U.S.N., B.S., United States Naval Academy
ALBERT BUDDY SCOLES, Lieut. U.S.N., B.S., United States Naval Academy
APOLLO MILTON OLIN SMITH, B.S., and M.S. in ME, California Institute

METEOROLOGY

JOHN BEVIER ACKERMAN, First Lieut. U.S.A., B.S., United States Military Academy
MORRIS GERSHJOHN, B.S., Brooklyn College
HYMAN DAVID GOODMAN, B.S., University of Illinois
HENRY OSCAR KRUSE, B.A., University of Cincinnati
WILLIAM JULIUS LINDSTROM, M.E., Rensselaer Polytechnic Institute
THOMAS SAMUEL MOORMAN, JR., First Lieut. U.S.A., B.S., United States Military Academy
SIDNEY ANDREW OPSTHUN, First Lieut. U.S.A., B.S., United States Military Academy
HAROLD LESTER SMITH, First Lieut. U.S.A., B.S., United States Military Academy
WILLIAM SEBASTIAN STONE, First Lieut. U.S.A., B.S., United States Military Academy
DELBERT GEORGE VAN ORNUM, B.A., University of Washington

Bachelor of Science

SCIENCE

CARL WILHELM AHLROTH, JR.
†RICHARD HARVEY ALLEN
*†JAMES ROBINSON BALSLEY, JR.
*DAVID KENT BEAVON
THEODORE ARNOLD BERTNESS
WILLIAM THOMAS CARDWELL, JR.
ROBERT BROADWELL CARR
CARROLL F. CHATHAM
ROGER HARRISON COWIE
ROBERT STANLEY CUSTER
†DONALD DOUGLAS DAVIDSON
ROBERT CRAIG DAVIDSON
PAUL ARTHUR DENNIS
BLAINE ANDREW DIXON, JR.
JACK FRANCIS DOUGHERTY
ARTHUR CLEMENT ELLINGS
WILLIAM JOHN FREEDE
CHRIS GREGORY
CLYDE WINGER HARRIS
RUSSELL EDWARD HAYWARD
CARLTON LEON HORINE
†LOWELL HARRISON HULBIRT
BENJAMIN KAZAN
JACK WILLIAM KNIGHT
*†HARRISON MORTON LAVENDER, JR.
*ROBERT JULES LEVIT

JOHN CUNNINGHAM LILLY
†DAVID BROWN LUCKENBILL
†JOHN GODFREY McLEAN
FREDERIC HOLLWAY MOORE
HARPER QUA NORTH
ROBERT HORNER OLDS
*JOHN EVERSOLE PARKER
†RICHARD ROSENCRANZ, JR.
GEORGE THOMAS RUDKIN
GARN ARTHUR RYNEARSON
MAURICE J. SCHLATTER
C. NORMAN SCULLY
*DAVID MARK SHERWOOD
†PAUL CHARLES SIECHERT
†CLAY TAYLOR SMITH
†ROLAND CRUSE STONE
GEORGE WALD, JR.
ALBERT C. WALKER
JAMES WENDELL WATSON
SAMUEL EUGENE WATSON, JR.
EDWARD LEE WEINBERGER
*RICHARD NORMAN WIMPRESS
EMANUEL WINDSOR
WILLIAM WHITE WOODBURY
JOHN ROBERT WOOLSON

ENGINEERING

WILLIAM S. ALTHOUSE, JR.
MICHEL AMBROFF
†JOHN RAYMOND BAKER
†ROBERT JOSEPH BARRY
ELLIOTT POWELL BENNETT
*SIDNEY BERTRAM
HARRY BERTHOLD BOLLER
ELLIOTT HINMAN BONHAM
CLARK DOUGLASS BOWER
*WILLIAM CARL BRENNER
ROBERT EDGAR CARR
CHARLES WILLIAM CLARKE
THOMAS V. DAVIS
*MUNSON WHITE DOWD
ARTHUR CLIFFORD DOWNING
†ARMAND FREDERICK DUFRESNE
WILLIAM B. ELCONIN
†BRUCE CASS ELLIOTT
†HERBERT BAILEY ELLIS
†HENRY KING EVANS
JOHN D. FARNEMAN
RICHARD WILSON FOLKINS
RICHARD BLAIR FORWARD
CARL FREDERICK FRIEND
EDWARD NATHANIEL FRISIUS
PETER CLAYTON GOFF
BOYNE BUELL GRAINGER
*ORAN AVERY GRAYBEAL, JR.
ARTHUR GEORGE GROSS
†GEORGE BENJAMIN HOLMES, JR.
HENRY STUART HOPKINS
*DONALD ELLIS HUDSON
NICKOLAS GIORGIEVICH IVANOFF
†FRANK BALDWIN JEWETT, JR.
JACK JOHANNESSEN
†EVAN ALBERT JOHNSON, JR.
†RALPH WILSON JONES, JR.
*WILSON BURDETTE JONES
*ALBERT EARNEST JURS, JR.

SAMUEL HARRIS KELLER
LEROY BRUCE KELLY
DALIMIL KYBAL
JOHN J. LENTZ
YUAN-CHUEN LI
†FREDERICK EATON LLEWELLYN
CLARE FRANK LOWE
C. KEITH MASON
JOHN THOMAS McGRAW
JOHN L. MERRIAM
ROBERT GERSON METZNER
WILLIAM EDWARD MILBURN
JOHN K. MINASIAN
HENRY TAKESHI NAGAMATSU
†WILLIAM FRANCIS NASH, JR.
†GEORGE H. OSBORN
JOSEPH FRANK PIRO
EDWIN JEWETT PORTER
WILLIAM RHETT
†RICHARD MERRILL ROWELL
PHILLIP E. SAURENMAN
AUGUST V. SEGELHORST
EDMOND FRANCIS SHANAHAN
HAROLD W. SHARP
PHILIP FRICK SHEPHERD
ARTHUR WILLIAM SIDLER
JAMES FARREN STEVENS
LOUIS HERNAN TEJADA
†ROBERT COGGESHALL THOMAS
PAUL OWEN TILKER
CHI-CHENG TSAO
WILLIAM EDWARD TWISS, JR.
†JOHN RICHARD van FLEET
JAMES WILKES VAN HORN
J. L. VELAZQUEZ
STANLEY VAN VOORHEES
DONALD REXFORD WARREN
†LUPTON ALLEMONG WILKINSON, JR.
GARDNER POND WILSON
†STANLEY T. WOLFBERG
*HOMER JESSE WOOD

*Graduated with honor in accordance with a vote of the Faculty.

†Awarded the Honor Key by the Associated Student Body for participation in student activities.