

Commencement

CALIFORNIA INSTITUTE OF TECHNOLOGY

PASADENA

June 9, 1939, 4:45 o'clock

PROCESSIONAL MARCH—

Marche and Cortège, from the Queen of Sheba Gounod
The Institute Band

Invocation and Chaplain's Address

THE MOST REVEREND JOHN J. CANTWELL, D.D.

Address

"OPPORTUNITY IN THE FORTIES"

WILLIAM C. MULLENDORE, A.B., J.D.

Presentation of Candidates for Degrees

FREDERIC W. HINRICH, JR., M.A.

Dean of Upper Classmen

WILLIAM V. HOUSTON, Ph.D.

Member of Committee on Course in Science

FRANKLIN THOMAS, C.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 ANDREW 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

FREDRICK TAYLOR ADDICOTT, A.B., Stanford University
HUBERT ANDREW ARNOLD, A.B., University of Nebraska
CARROL MENEFEE BEESON, A.B., University of California at Los Angeles
ROLAND ANTHONY BUDENHOLZER, B.S., New Mexico State College; M.S., California Institute
NEPHI ALBERT CHRISTENSEN, B.S., Brigham Young University; B.S.C.E., University of Wisconsin;
M.S., California Institute
DJEN-YUEN CHU, B.S., National Central University; M.S., California Institute
HORACE WILLARD DAVENPORT, B. S., California Institute; B. A., and B. Sc., Oxford University
ROBERT PALMER DILWORTH, B.S., California Institute
ROBERT MARX DREYER, B.S., Northwestern University; M.S., California Institute
PAUL CHARLES FINE, B.A., University of Oklahoma; M.S., California Institute
MARK GARDNER FOSTER, A.B., Miami University
BRUCE LATHAN HICKS, B.S., and M.S., California Institute
RICHARD HUTCHINSON HOPPER, B.A., and M.A., University of California at Los Angeles
NORMAN HAROLD HOROWITZ, B.S., University of Pittsburgh
WALTER LAVERN HOWLAND, B.S., and M.S. in ME, and M.S. in AE, California Institute
FREDERICK DELBRIDGE KNOBLOCK, B.Sc., and M.S., University of Michigan
THOMAS LAURITSEN, B.S., California Institute
ALBERT EATON LOMBARD, JR., B.S., and M.S., California Institute
ROBERT HARLAN MACKNIGHT, A.B., Columbia University
GILBERT DONALD McCANN, JR., B.S., and M.S., California Institute
WILLIAM BURDETTE McLEAN, B.S., and M.S., California Institute
FRANK OPPENHEIMER, B.A., Johns Hopkins University
SIMON PASTERNAK, B.Sc., University of Alberta
ROBERT SORG SCHAIRER, B.S., Swathmore College; M.S., California Institute
WILLIAM SHELDON STEWART, B.A., and M.A., University of California at Los Angeles
ARTHUR JAMES STOSICK, B.S., University of Wisconsin
CHARLES HARD TOWNES, B.A., and B.S., Furman University; M.A., Duke University
ANGUS CAMPBELL TREGIDGA, B.A., and B.A. Sc., University of British Columbia
HSUE-SHEN TSIEN, B.S., Chiao-tung University; M.S. Massachusetts Institute of Technology
JOHN NORTON WILSON, B.A., and M.A., University of British Columbia
REUBEN ESSELSTYN WOOD, B.S., California Institute; M.S., University of Chicago
LLOYD ROBERT ZUMWALT, B.S., University of California.

Master of Science in Science

PHYSICS

EDGAR LEO ARMI, Diploma, Munich Institute of Technology
CHRIS GREGORY, B.S., California Institute
CHAO-WANG HSUEH, B.S., National University of Peking
ROBERT HORNER OLDS, B.S., California Institute
JOSEPH ANTHONY VARGUS, JR., A.B., Amherst College; B.A., Cambridge University

CHEMISTRY

GUSTAV ALEXANDER ALBRECHT, B.S., California Institute
KENNETH JUSTIN GOERING, B.S., Montana State College
FRANKLIN ROSS HEPNER, B.A., University of Wyoming

CHEMICAL ENGINEERING

WILLIAM THOMAS CARDWELL, JR., B.S., California Institute
ELLSWORTH EUGENE GULLEKSON, B.S., University of North Dakota
GEORGE PUTNAM HINDS, JR., B.E., ChE., Tulane University
HARRISON MORTON LAVENDER, JR., B.S., California Institute
MAX F. SMITH, B.S., University of California
HODGE SCOTT TAYLOR, JR., B.S., University of Illinois
GEORGE WALD, JR., B.S., California Institute.

GEOLOGICAL SCIENCES

WILLIAM ROSS CABEEN, A.B., University of California at Los Angeles
JAMES HENRY DeLONG, JR., A.B., Lafayette College
JACK FRANCIS DOUGHERTY, B.S., California Institute
ARTHUR BERNARD DRESCHER, B.S., South Dakota School of Mines
ALEXIS MARTIN EICHELBERGER, JR., A.B., University of California at Los Angeles
NOEL WILLIAMSON HENDRY, B.S., University of British Columbia
ROBERT BECK HOY, B.S., Lafayette College
ROBERT JOSEPH URICK, B.S., Brooklyn College
HARRY DAVID BRUCE WILSON, B.S., University of Manitoba

MATHEMATICS

ROBERT JULES LEVIT, B.S., California Institute
BERTRAM YOOD, B.S., Yale University

BIOLOGY

OLE LILLELAND, B.S., University of California

Master of Science in Engineering

ELECTRICAL ENGINEERING

- BYRON LUTHER HAVENS, B.S., University of Washington
- WINTHROP GILMAN JONES, B.S., University of Arizona
- JOHN JACOB LENTZ, B.S., California Institute
- CHARLES SMYTH MILLIKEN, B.S., California Institute
- THOMAS WILLIAM MOUAT, JR., B.A.Sc., University of British Columbia
- DAVID MARX SHERWOOD, B.S., California Institute
- JAMES FARREN STEVENS, B.S., California Institute
- KARL UNHOLTZ, B.S., California Institute
- JOSEPH WEINSTEIN, B.S., University of California

MECHANICAL ENGINEERING

- BYRON FREMONT BEANFIELD, B.S., University of Southern California
- SYDNEY FORD DUNCAN, B.S., California Institute
- CALVIN ANDREW GONGWER, B.S., Columbia University
- DONALD ELLIS HUDSON, B.S., California Institute
- CARR CHIA-CHANG LIANG, B.Sc., Catholic University of Peiping
- HARRY MAJORS, JR., B.S., University of California
- WILLIAM FRANCIS NASH, JR., B.S., California Institute
- PETER VAN HORNE SERRELL, B.S., California Institute
- HERBERT BARNETT SHAPIRO, B.S., and M.S., in My, California Institute
- HAROLD WILSON SHARP, B.S., California Institute
- WILLIAM OWEN WETMORE, B.S., California Institute

CIVIL ENGINEERING

- WILLIAM HENRY BONELL, B.S., South Dakota State College
- HARRY HALL CARRICK, B.S., California Institute
- GEORGE MARTIN DORWART, B.S., California Institute
- RICHARD WILSON FOLKINS, B.S., California Institute
- CHARLES MACKINTOSH, B.S., and M.S., in CE, Colorado Colleg
- JOSE PULIDO ORTIZ, C.E., Military College of the National University of Mexico
- HERBERT RAMSEY SHEPPARD, B.S., California Institute
- ARTHUR WILLIAM SIDLER, B.S., California Institute
- WARREN ELVIN WILSON, C. E., Lehigh University; M.C.E., Cornell University

AERONAUTICS

- IRVING LOUIS ASHKENAS, B. S., and M.S. in M.E., California Institute
- GEORGE FRANCIS BEARDSLEY, Lieut. U.S.N., B.S., United States Naval Academy
- LEONIDAS DIXON COATES, JR., Lieut. U.S.N., B.S., United States Naval Academy
- HSU-TSI FAN, Eng. in M.E., Harbin Polytechnic Institute; M.S. in ME, California Institute
- ANDREW MCBURNEY JACKSON, JR., Lieut. U.S.N., B.S., United States Naval Academy
- SUNAO KANEMITSU, B.S., University of California; M.S. in ME, California Institute
- NOBLE NOJIMA, B.S., and M.S., in ME, California Institute
- ELLIOTT WALTER PARISH, JR., Lieut. U.S.N., B.S., United States Naval Academy
- CLARK NEIL PIPER, First Lieut. U.S.A., B.S., United States Military Academy
- GEORGE YOSHIO TSUBOTA, B.S., and M.S. in ME, California Institute
- TSUN-KUEI WANG, B.S., National University of Peking; M.S. in ME, California Institute

METEOROLOGY

- MARTIN CHARLES BURNS, Lieut. U.S.N., B.S., United States Naval Academy
- LEO PETER DAHL, First Lieut. U.S.A., B.S., United States Military Academy
- ROBERT LOYAL EASTON Captain U.S.A., B.S., United States Military Academy
- IVAN LONSDALE FARMAN, First Lieut. U.S.A., B.S., California Institute
- ROBERT FREEMAN FULTON, First Lieut. U.S.A., B.S., United States Military Academy
- JOHN DePEYSYER TOWNSEND HILLS, First Lieut. U.S.A., B.S., United States Military Academy
- WILSON HAWKES NEAL, First Lieut., U.S.A., B.S., United States Military Academy
- PAUL ELMER RUCH, B.S., Massachusetts Institute of Technology
- FRANK BRISCOE STEPHENS Lieut. U.S.N., B.S., United States Naval Academy
- JOHN FLETCHER TATOM, Lieut. U.S.N., B.S., United States Naval Academy
- DONALD NORTON YATES, First Lieut. U.S.A., B.S., United States Military Academy

Bachelor of Science [Five Year Course]

AERONAUTICS

- ✓ STEVEN ERIC BELSLEY, B. S., Purdue University
- ✓ ANDREW FEJER, M.E., Technische Hochschule at Prague, Czechoslovakia
- ✓ HAROLD FISCHER, B.A., University of California at Los Angeles
- ✓ JOSEPH LOUIS FREDRICK, B.S., Louisiana State University
- ✓ DALIMIL KYBAL, B.S., California Institute
- ✓ HENRY TAKESHI NAGAMATSU, B.S., California Institute
- ✓ WALTER BROWN POWELL, B.A., Stanford University
- ✓ JOSE LUIS VELAZQUEZ, B.S., California Institute
- ✓ ROBERT HENRY WIDMER, B.S., Rensselaer Polytechnic Institute

METEOROLOGY

- ✓ EDGAR ALLAN AIME, B.S., Tulane University
- ✓ KENNETH SMITH NORQUEST, B.S., College of Idaho
- ✓ ROBERT ALEXANDER SANDERS, B.S., Cumberland University
- ✓ PAUL BEALS STRECKEWALD, B.S., University of Wisconsin

BACHELOR OF SCIENCE (Four Year Course)

SCIENCE

GEORGE ASAKAWA
JOHN ALLEN BATTLE
WILLIAM EUGENE BERG
RICHARD HAWLEY BISHOP
ROBERT CARTER
CLAUDE HOWARD CRAFT
VIRGIL KENMORE CRAWFORD
BARRY DIBBLE, JR.
HERMAN SIGMUND ENGLANDER
JOHN C. EYWARD
DELOS EDWARD FLINT
WILLIAM REX FRAMPTON, JR.
RAY VAN DEUSEN GERHART
JOSEPH JOHN GOMBOITZ
JOHN ROBERT GRIFFITHS
ROBERT CHRISTIAN HAGEN
‡FRANCIS CHANDLER INGALLS
LOUIS LAWRENCE KOLB
ROBERT McCLUNG KYTE
LEO SILVIO LAVATELLI
MELVIN N. LEVET

*KENNETH GORDON MACLEISH
WALTER HEINRICH MUNK
EDWARD HAIG PARKER
JOHN McCOWAN PEAT, JR.
*EDMUND JOY PINNEY
KEATS A. PULLEN, JR.
FRANK RADOVICH
LEO JAMES RAINWATER
VOLNEY K. RASMUSSEN, JR.
LOUIS JOHN REGAN, JR.
FRANCIS ALLEN ROBERTSON
*BERT VICTOR ROUDEBUSH
*SYLVAN RUBIN
RALPH JOHN RUGGIERO
DAVID HOLCOMB SCOTT
THURSTON SKEI
PHILIP ERNEST SMITH
JAMES EUGENE STONES
†ROBERT WILLIAM WHITE
UDENE EARL YOUNGER
HOMER SMITH YOUNGS

ENGINEERING

CLARENCE RUSSELL ANDERSON
†NOAH HERBERT ANDERSON, JR.
BASIL PETROVICH ANTONENKO
CHARLES HENRY BAUER, JR.
LEO ROY BEARD
†DUANE WESLEY BECK
JOHN WILLIAM BLACK
LAWRENCE GLENN BORGESON
RICHARD R. BRADSHAW
KENNETH RANKIN BRAGG
JAMES WILLIAM BRAITHWAITE
CLAUDE HANCOCK BROWN, JR.
PERRY HARRINGTON BROWN
WILLIAM LOWE BROWN
JOHN JAKE BROWNE
FRANCIS LACEY CARLISLE
*CHARLES FREDERICK CARSTARPHEN
RALPH KENNETH COLLINS
RONALD B. CONNELLY
GEORGE OLDS CROZIER
HARRY OWENS DAVIS, JR.
*PHILIP SARKIS DEVIRIAN, JR.
WALTER A. DIEHM
PAUL O. ENGELDER
RICHARD A. FISCHER
STUART MacMILLAN FRASER
JAMES SCOTT GASSAWAY
*JACK HUGH GOODELL
HARRY ALLEN GOODIN, JR.
*ALBERT PENNINGTON GREEN
WILLIAM MANNING GREEN
EDGAR ALLEN GRISWOLD
MARCUS A. HALL
HAROLD VIVIAN HANCE
ANDREW LUCIEN HANNON
ROBERT WALTER HAUSSLER
ERNEST MICHAEL HIEHLE

FREDERICK CARL HOFF
GEORGE MARION HOTZ
DAVID ELMORE HOYT
ROBERT BARRY KIMBALL
JOHN KONECNIK
†DONALD GIBB LAWRIE
†WILLIAM G. LAWSON
†CURTIS MUNN LEE
†HARLOWE JULIUS LONGFELDER
TYLER MATTHEW
*†RODERICK MARSHALL McCLUNG
FRANK EWING McCREERY
JAMES ROBB McKINLAY
W. DEMING MERRICK
GEORGE KIYOSHI MORIKAWA
WILLIAM MEAR NORTON, JR.
SPENCER WHITTEMORE OAKLEY
†JOHN EDWARD OSBORN
CARL HUTTON PAUL
CHARLES EDWARD PETTINGALL
RICHARD KELLEY POND
JAMES CLIFTON RITCHEY
†WILLIAM ARTHUR ROOT
WILLIAM FRANKLIN ROPP
CARL JOSEPH SCHNEIDER
QUIDO MILES SHULTISE
GEORGE WILLIAM SINCLAIR
JOSIAH EDWARD SMITH
†PAUL LOUIS SMITH
ROBERT LOUIS SMITH
WILLARD MITCHELL SNYDER
†HERBERT DAVIS STRONG, JR.
EDWIN FRANKLIN SULLIVAN
ROBERT FULTON TANGREN
ROBERT WINSLOW WINCHELL
LESTER GOFFIN ZUKERMAN

*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.

‡Deceased, February 28, 1938. Degree awarded posthumously in recognition of outstanding scholastic attainment.