

Commencement

CALIFORNIA INSTITUTE OF TECHNOLOGY

PASADENA

June 13, 1930, 4:00 o'clock



PROCESSIONAL MARCH—

Triumphal March from "Sigurd Jorsalfar" - - - - - *Grieg*
The Institute Orchestra

Invocation

HYMN—"America" - - - - - *Smith*

Chaplain's Address

THE REV. EDWARD ARCHIBALD THOMPSON, D.D.

SONG—"Invictus" - - - - - *Bruno Huhn*
The Institute Glee Club

Address

"THE GEOLOGICAL SCIENCES AND HUMAN PROGRESS"

JOHN PETER BUWALDA, PH.D.

Presentation of Candidates for Degrees

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

SAMUEL STUART MACKEOWN, PH.D.

Chairman of Committee on Course in Science

WILLIAM HOWARD CLAPP, E.M.

Chairman of Committee on Course in Engineering

RICHARD CHASE TOLMAN, PH.D.

Chairman of Committee on Graduate Courses

Conferring of Degrees

on behalf of the Trustees and Faculty

ROBERT A. MILLIKAN, PH.D., LL.D., SC.D.

Chairman of the Executive Committee

Announcements

SONG—"Hail C. I. T." - - - - - *Barnes*

Benediction

POSTLUDE—March

(The audience will stand during the entry of the Academic Procession, the Invocation, and the singing of "America" and "Hail C. I. T.")

Candidates for Degrees

Doctor of Philosophy

CARL DAVID ANDERSON, B.S., California Institute of Technology
WARREN NELSON ARNQVIST, B.S., Whitman College
LEE REED BRANTLEY, A.B., University of California at Los Angeles; M.S., California Institute of Technology
CHARLES HAWLEY CARTWRIGHT, B.S., California Institute of Technology
BENEDICT CASSEN, A.R.C.S., Imperial College of Science and Technology, London; M.S., California Institute of Technology
CHUNG-YAO CHAO, B.S., National Southeastern University, Nanking
RALPH KOHLRAUSCH DAY, Ph.B., Yale University
CHARLES LEWIS GAZIN, B.S. and M.S., California Institute of Technology
LYNN GORMAN HOWELL, B.A. and M.A., University of Texas
NORRIS JOHNSTON, B.S. and M.S., Massachusetts Institute of Technology
RALPH LEONARD LUPHER, B.A. and M.A., University of Oregon
DANIEL BRENT MCRÆ, B.S., University of Utah
WALTER CHRISTIAN MICHELS, B.S., Rensselaer Polytechnic Institute
BERNARD NETTLETON MOORE, B.S., California Institute of Technology
JOHN MAGNUS PEARSON, B.S., University of Chicago
JAMES HOLMES STURDIVANT, B.A. and M.A., University of Texas
EDWARD MOULTON THORNDIKE, B.S., Wesleyan University; A.M., Columbia University
HOMER BIGELOW WELLMAN, B.A., Carleton College; M.S., University of Michigan

Master of Science

PHYSICS

RALPH BLAISDELL ATKINSON, B.S., Massachusetts Institute of Technology
MAURICE FRED HASLER, B.S., California Institute of Technology
OMAR BURT RICHARDSON, Ph.B., Yale University
GALEN BRANDT SCHUBAUER, B.S., Pennsylvania State College

CHEMISTRY

RICHARD WERNER STENZEL, B.S., California Institute of Technology
JOSEPH WINCHESTER URMSTON, A.B., University of California at Los Angeles

GEOLOGY AND PALEONTOLOGY

ROLLIN POLLARD ECKIS, B.A., Pomona College
LOZELL CHARLES HOOKWAY, B.S., California Institute of Technology
FRANKLIN MAC MURPHY, B.A., University of California at Los Angeles
JOHN CLARK SUTHERLAND, B.S., California Institute of Technology

ELECTRICAL ENGINEERING

EUGENE ATWATER, B.S., California Institute of Technology
JACK SCARBOROUGH BOREN, B.A., University of Redlands
VIVIAN LYMAN HOLDAWAY, B.S., California Institute of Technology
EDWARD EVERETT KINNEY, B.S., Michigan State College
CHARLES COYLE LASH, B.S., California Institute of Technology
JOHN GIBSON PLEASANTS, B.S., University of Southern California
JOHN WILLIAM THATCHER, B.S., California Institute of Technology

MECHANICAL ENGINEERING

DONALD SHERMAN CLARK, B.S., California Institute of Technology
HARRY JAMES KEELING, B.S., California Institute of Technology
GEORGE SCHILD LUFKIN, B.S., California Institute of Technology
MASAHIRO HOWARD NAGASHI, B.S., California Institute of Technology
EZRA C. POSNER, M.E., Cornell University
HOMER CHARLES REED, B.S., California Institute of Technology
HOWARD WINFRED WAITE, B.S., California Institute of Technology

CIVIL ENGINEERING

DONALD PORTER BARNES, B.S., Oregon State College
FREDERICK R. CLINE, B.S., California Institute of Technology
THOMAS HAYHURST EVANS, B.S., California Institute of Technology
ERNEST BRANCH HUGG, B.S., California Institute of Technology
WILLIAM HENRY MOHR, B.S., California Institute of Technology
SAMUEL OLMAN, B.S., California Institute of Technology

CHEMICAL ENGINEERING

WADSWORTH EGMONT POHL, B.S., California Institute of Technology
LOREN P. SCOVILLE, A.B., University of Redlands
FREDERICK PEARCE STAPP, A.B., Stanford University

AERONAUTICAL ENGINEERING

ERNEST EDWIN SECHLER, B.S., and M.S. in Mechanical Engineering, California Institute of Technology

Bachelor of Science

Engineering

FRANK EDWARD ALDERMAN
JOHN EDWARD ANDERSON
WILBUR WALTER AYERS
HOWARD EUGENE BAKER
J. R. LESTER BOYLE
ROBERT HENRY BUNGAY, JR.
ALBERT BUTLER
DEANE E. CARBERRY
HOWARD CARY
BERTRAM RUSSELL COUPLAND
FRANKLIN GOODRICH CRAWFORD
HERBERT HADLEY DEARDORFF
LYON SPRAGUE DE CAMP
ROSCOE PHILLIPS DOWNS
KARL HERMAN EFFMANN
ORRIN MATTHEWS ELLIOTT
EUGENE VANCE ELLIS
LAWRENCE GILBERT FENNER
HENRY EDWARD FRACKER
CLINTON EUGENE GATES
CLYDE EDGAR GIEBLER
EDMUND GLEN GRANT
FRED RESTON GROCH
JOHN LELAND HALL
WILLIAM BELL HATCH, JR.
JOHN FRED HESSE, JR.
ERNEST CHRISTIAN HILLMAN, JR.
THOMAS TAMOTSU HIYAMA
REA EARL HOPPER
SAMUEL ERIC HOWSE
ALEX IVAN IGNATIEFF
HARLEN RICHARD ERNEST JONES
WILLIAM FRANCIS KELLEY
HUGO OTTO KLEINBACH
EDWARD KOEHM

MELVIN LAWRENCE LEPPERT
ERNEST LEVINE
R. STANLEY LORD
JAMES H. MACDONALD
HARRY SHATTUCK MASON, JR.
HARRIS KENNETH MAUZY
RALPH STEWART MCLEAN
KENNETH L. MILES
*FRANK NEFF MOYERS
ELMER MASON MUFF
HENRY GLYSSON MYERS
ARTHUR BEHREND NOMANN
JACK DEAN PRITCHETT
*GEORGE WILBER READ
GEORGE LAWRENCE REYNOLDS
WILLIAM CHRISTOPHER RIGGS
GEORGE ARTHUR ROSS
LLOYD WALLACE RUSSELL
*DAVID SHEFFET
JOHN CHARLES SHIELDS
MICHAEL MORRIS SILVERMAN
*THEODORE FRANK STIPP
AUSTIN STRONG
JOHN B. STURGESS
KATSUNOSHIN SUZUKI
FREDERICK THAYER SWIFT, JR.
EUGENE MERLIN THAYER
JOHN WILLIAM TOWLER
HOWARD WINFRED WAITE
*GEORGE RICHARD WHEELER
DUDLEY LAWTON WHITE
NATHAN DAVIS WHITMAN, JR.
OSWALD FRANCIS ZAHN, JR.
SIDNEY ZIPSER

Science

DONALD KREECK ALLISON
IRA CHRISTIAN BECHTOLD
*TOM GEORGE BERNHARDI
CLYDE L. BLOHM
FRANCIS DASHWOOD BODE
BERT VESSIE BRASHER
CHESTER FLOYD CARLSON
JOHN DRURY CLARK
HORACE RICHARD CRANE
NORMAN FREDERICK DOHERTY
HARVEY SELDEN EASTMAN
EMORY LEON ELLIS
JOSEPH FOLADARE
MORGAN THOMAS FORNEY
JOHN WALLACE GAYLORD
JOHN DOUGLAS HAMILTON
ROLAND CYRIL HAWES
ROLAND FREDERICK HODDER

RAYMOND WINFIELD HOEPEL
HENRY OSCAR IMUS
OTTO PHILIP JANSSEN
JOSEF JEROME JOHNSON
TRUMAN HOWARD KUHN
HARLAND RAY MOSS
JOHN STALKER MURRAY
WARREN CAMPBELL NELSON
LAWRENCE CARLTON NYE
HERBERT GOODMAN SAWYER
DAVID WALTER SCHARF
FREDERICK SCHELL SCOTT
*ROBERT INGERSOLL STIRTON
*OSCAR FRANZ VAN BEVEREN
SAMUEL STEWART WEST
WALTER DUNBAR WILKINSON, JR.
ROBERT WARREN WILSON

* With Honor

America

My country! 'tis of thee,
Sweet land of liberty,
Of thee I sing;
Land where my fathers died,
Land of the Pilgrim's pride,
From every mountain side
Let freedom ring.

Our fathers' God to Thee,
Author of Liberty,
To Thee we sing:
Long may our land be bright
With Freedom's holy light;
Protect us by Thy might,
Great God our King.

—*S. F. Smith*

Hail C. I. T.

In Southern California with grace and splendor bound—
Where the lofty mountain peaks look out to lands beyond,
Proudly stands our Alma Mater, glorious to see.
We raise our voices hailing, hailing, hailing thee:
Echoes ringing while we're singing over land and sea;
The halls of fame resound thy name, noble C. I. T.

—*Manton M. Barnes, '21*