

CALIFORNIA  
INSTITUTE  
OF  
TECHNOLOGY

COMMENCEMENT  
EXERCISES

FEBRUARY 18, 1944

4:00 P. M.

PASADENA CIVIC AUDITORIUM

# PROGRAM

CONCERT AND PROCESSIONAL MARCH

The Navy V-12 Band

INVOCATION AND CHAPLAIN'S ADDRESS

The Reverend Lloyd C. Douglas, D.D., LL.D., Litt.D.

COMMENCEMENT ADDRESS

*The Nation's Accomplishments During Two Years of War in the Fields of Research, Production, and Fighting.*

Rear Admiral Wilson Brown, U. S. N., *Naval Aide to the President*

CONFERRING OF CERTIFICATES AND DEGREES

*Candidates presented by*

Winchester Jones, A.B., *Assistant Dean of Upper Classmen*

W. R. Smythe, Ph.D., *Chairman of the Committee on the Course in Science*

W. W. Michael, B.S., *Chairman of the Committee on the Course in Engineering*

Roscoe G. Dickinson, Ph.D., *Acting Dean of the Graduate School*

*Degrees conferred on behalf of the Trustees and Faculty by*

Robert Andrews Millikan, Ph.D., LL.D., Sc.D., *Chairman of the Executive Council*

"THE YEAR'S PROGRESS"

Dr. Millikan

HYMN: "FOR THOSE IN PERIL ON THE SEA"

(The words are printed on the last page)

BENEDICTION

THE NATIONAL ANTHEM

Certificates

CANDIDAT

~~Hale Chapin Field~~

Milo Sedgwick Gates

George Meade Holstein, III

Clement Richard Huntsberger

Jeremy Jerome Lamb

B.

Willard Wallace Smith

George Woodbury Stimson

Dean Putnam Stone

Hubert Witter

Harry John Witz

CRAN HARDIN BARROW  
ARTHUR NAEOLE CARSON  
HOWARD HOW CHUNG CHAN  
CHARLES SHIPLEY COX  
CLIFFORD INGEBRITSON  
CUMMINGS  
STANLEY SCHEMMER DAY  
WILLARD ALMUR DODGE, JR.

GRANT LEE BENSON, JR.  
FREDERICK BERTRAM ELY  
DONALD A. KEATING  
ALFRED GEORGE KNUDSON, JR.

BACH

CHARLES GILBERT ALMQUIST, JR.  
FRANK ANTHONY ALONSO  
WARREN AMSTER  
TWAY WALTER ANDREWS\*†  
ERTUGUL BIRLIK  
JAY ROLDEN BORDEN\*  
JOSEPH RAYMOND BRUMAN

DEAN RODEN CHAPMAN\*  
HAROLD VICTOR CURCI  
ELMER SCOTT HALL  
DAVID ROUX JONES  
FRANKLIN HENRY KNEMEYER  
FRANK WELBORN LEHAN\*  
JOHN WARREN MARSHALL

ANTHONY JOHN ANDREW  
MORGAN  
FREDERICK WILLIAM MORRIS, JR.  
JOHN BYRD NELSON\*  
WHEELER JAMES NORTH  
HANS NUETZEL  
OWEN SPENCER OLDS

Warren Orvil Kott

William Pickering Harland

# CANDIDATES FOR CERTIFICATES AND DEGREES

## CERTIFICATE

(Names of recipients of certificates will  
be announced by the Registrar.)

## BACHELOR OF SCIENCE IN SCIENCE

### CIVILIAN STUDENTS

CRAN HARDIN BARROW	THOMAS LEWIS GILBERT*	JAMES MCTAGUE PLOESER
ARTHUR NAEOLE CARSON	FORREST RICHARD GILMORE*	WESLEY ROBERT SANDELL
HOWARD HOW CHUNG CHANG	LEON GREEN, JR.	RAYMOND ALFRED SAPLIS
CHARLES SHIPLEY COX	JAY EDWIN HAMMEL	ALOIS WOLFGANG SCHARDT*
CLIFFORD INGBRITSON	GARMAN HARBOTTLE	CORNELIUS STEELINK
CUMMINGS	CARL OGDEN MATTINSON	ROBERT G. THOMAS
STANLEY SCHEMMER DAY	FRANCIS E. ODELL†	CHARLES ALEXANDER TRILLING
WILLARD ALMUR DODGE, JR.	WILLIAM WILKES OLENBUSH	WILLIAM MALLEY TRIMBLE

### NAVY V-12 STUDENTS

GRANT LEE BENSON, JR.	ROBERT WAYLAND LESTER	MAURICE RATTRAY, JR.
FREDERICK BERTRAM ELY	JOSEPH STEWART MARTIN	JOHN ROBERT REMPEL*
DONALD A. KEATING	LOUIS SHREVE OSBORNE*	WILLARD RICHARD SCOTT, JR.
ALFRED GEORGE KNUDSON, JR.*	BRUNO HARRISON PILORZ	JAMES TUEDIO

## BACHELOR OF SCIENCE IN ENGINEERING

### CIVILIAN STUDENTS

CHARLES GILBERT ALMQUIST, JR.	DEAN RODEN CHAPMAN*	ANTHONY JOHN ANDREW
FRANK ANTHONY ALONSO	HAROLD VICTOR CURCI	MORGAN
WARREN AMSTER	ELMER SCOTT HALL	FREDERICK WILLIAM MORRIS, JR.
TWAY WALTER ANDREWS*†	DAVID ROUX JONES	JOHN BYRD NELSON*
ERTUGUL BIRLIK	FRANKLIN HENRY KNEMEYER	WHEELER JAMES NORTH
JAY ROLDEN BORDEN*	FRANK WELBORN LEHAN*	HANS NUTZEL
JOSEPH RAYMOND BRUMAN	JOHN WARREN MARSHALL	OWEN SPENCER OLDS

Warren Orvil Kott

William Pickering Harland

ROBERT JOSEPH PARKS\*  
 ROLF W. PROTZEN†  
 DAVID FREDERICK RUTLAND  
 LEROY SANDERS, JR.

ARTHUR WARREN SCHNACKE  
 HARRISON WILLIAM SIGWORTH\*  
 FRANK CHESLEY SMITH, JR.†  
 SUREYYA RAFET TANYILDIZ

LEON TRILLING  
 JOHN CHARLES WARREN  
 DOYLE ERNEST WILCOX\*  
 GREGORY ODD YOUNG

#### NAVY V-12 STUDENTS

ROBERT EMERSON ALLINGHAM  
 WILLIAM PERKINS BAIR†  
 FRANK ARTHUR BARNES\*  
 BARTON BREWSTER BEEK  
 FREDERICK ALBERT BEHRENS, JR.  
 WILLIAM HOWARD BOND  
 FRANKLIN OTIS BOOTH, JR.  
 ROSS ALTON BUCHANAN

WILLIS ARTHUR BUSSARD†  
 HERBERT JOHN CABRAL  
 KENNETH ROSS DEREMER\*  
 ALVIN MARTIN GALBREATH  
 EDWARD ADOLPH GOLDSMITH  
 WINFIELD HENRY HUGHES  
 RALPH WALDO MARSHALL, JR.  
 ROBERT KIDD MITCHELL\*  
*Hale Chapin Field*  
*Lewis L. Grimm*

CARL WARREN OLSON  
 HERMAN PROCTOR, JR.  
 RICHARD WARREN SEED  
 GEORGE SHOR, JR.\*  
 RICHARD JOSEPH SOIKE  
 ALBERT TENNEY SPAULDING, JR.  
 PAUL HUGO WINTER  
 PAUL LEWIS WOLF

*John Hart Wilson*

\*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.

#### MASTER OF SCIENCE IN SCIENCE

##### *Biology*

- ✓ KEITH S. DITMAN, B.S., Santa Barbara State College, 1942.

##### *Chemistry*

ALLAN LOUIS GROSSBERG, B.S., California Institute, 1942.

##### *Chemical Engineering*

- ✓ DANIEL FUNDERBURG BOTKIN, B.S., New Mexico College of Agriculture and Mechanic Arts, 1939.

##### *Geological Sciences*

- ✓ WALTER ROSS FILLIPPONE, B.A., Marietta College, 1942.  
 ✓ ENRIQUE F. SILGADO, Bachiller en Ciencias Matemáticas, Universidad Nacional Mayor de San Marcos, 1942.  
 ✓ SULHI YUNGUL, B.S., Montana School of Mines, 1943.

##### *Physics*

- ✓ ALAN H. ANDREW, B.S., University of Nebraska, 1942.  
 ✓ EUGENE WILLIS PETERSON, B.S., Purdue University, 1942.

## MASTER OF SCIENCE IN ENGINEERING

### *Aeronautics*

✓ HALIT SUNALP, M.S., University of Michigan, 1941.

### *Civil Engineering*

THOMAS GREY CURTIS, B.S., California Institute, 1942.

JOHN MARTIN FRENCH, B.S., California Institute, 1943.

### *Electrical Engineering*

NICHOLAS ANTHONY BEGOVICH, B.S., California Institute, 1943.

✓ PAUL JULIUS LABANAUSKAS, Royal Italian Naval Academy, 1931.

## DOCTOR OF PHILOSOPHY

RICHARD BYRD ESCUE, JR. (*Chemistry*), B.A., North Texas <sup>State</sup> Teachers College, 1939; M.A., 1940.

DAVID ROY VINCENT GOLDING (*Chemistry*), A.B., Harvard College, 1941.

NING HU (*Physics*), B.S., National Tsing Hua University, 1938.

GEOFFREY LORRIMER KEIGHLEY (*Biology*), B.A., University of Toronto, 1926; M.S., California Institute, 1940.

CHIA CHIAO LIN (*Aeronautics*), B.S., National Tsing Hua University, 1937; M.A., University of Toronto, 1941.

DON STANLEY MARTIN, JR. (*Chemistry*), B.S., Purdue University, 1939.

ROBERT CHARLES McMASTER (*Electrical Engineering*), B.S., Carnegie Institute of Technology, 1936; M.S., California Institute, 1938.

HERBERT SARGENT (*Chemistry*), B.S., California Institute, 1940.

A. MORDECAI ZAREM (*Electrical Engineering*), B.S., Armour Institute of Technology, 1939; M.S., California Institute, 1940.

## FOR THOSE IN PERIL ON THE SEA

ETERNAL FATHER, strong to save,  
Whose arm hath bound the restless wave,  
Who bidd'st the mighty ocean deep  
Its own appointed limits keep;  
Oh, hear us when we cry to Thee,  
For those in peril on the sea.

O Christ Whose voice the waters heard  
And hushed their raging at Thy word,  
Who walked'st on the foaming deep,  
And calm amidst its rage didst sleep;  
Oh, hear us when we cry to Thee  
For those in peril on the sea!

Most Holy Spirit! Who did'st brood  
Upon the chaos dark and rude,  
And bid its angry tumult cease,  
And give, for wild confusion, peace;  
Oh, hear us when we cry to Thee  
For those in peril on the sea!

O Trinity of love and power!  
Our brethren shield in danger's hour;  
From rock and tempest, fire and foe,  
Protect them wheresoe'er they go;  
Thus evermore shall rise to Thee  
Glad hymns of praise from land and sea.

THIS IS A SONG BENEDICTION which has particular application to sea-faring men. It was written in 1860 by the Reverend William Whiting, clergyman of the Church of England, after he had come through a terrible storm in the Mediterranean Sea. At the United States Naval Academy, this hymn is sung at the conclusion of every service.