

THE REGENTS OF THE

University of California

ON THE NOMINATION OF THE
GRADUATE COUNCIL OF THE BERKELEY DIVISION
HAVE CONFERRED UPON

RYAN L. SHELBY

HAVING DEMONSTRATED ABILITY BY ORIGINAL RESEARCH
IN ENGINEERING
THE DEGREE OF DOCTOR OF PHILOSOPHY
WITH ALL THE RIGHTS AND PRIVILEGES THERETO PERTAINING

GIVEN AT BERKELEY

THIS SEVENTEENTH DAY OF MAY IN THE YEAR
TWO THOUSAND AND THIRTEEN

Edmund G. Brown, Jr.
GOVERNOR OF CALIFORNIA AND
PRESIDENT OF THE REGENTS

Max H. Gluck
PRESIDENT OF THE UNIVERSITY



Robert J. Birge
CHANCELLOR AT BERKELEY

A. J. S. J.
DEAN OF THE GRADUATE DIVISION
AT BERKELEY