



## SIMON FRASER UNIVERSITY

Honorary Degree Citation  
The degree of Doctor of Science,  
conferred on Dr. Harry Gray  
Friday, October 9, 2015

Madam Chancellor, it is my distinct honour to present Harry Barkus Gray, the Arnold O. Beckman Professor of Chemistry and the Founding Director of the Beckman Institute at the California Institute of Technology.

Professor Gray is a renowned scholar and research leader whose seminal contributions to our chemical and scientific heritage place him at the forefront of the global scientific community. He is a pioneer in bioinorganic chemistry and the world's pre-eminent expert in biological electron transfer reactions. Among his many achievements, he developed Ligand Field Theory to interpret the electronic structures and reactions of transition metal complexes. Work from the Gray research group provides researchers world-wide with a basis from which to rationalize function in processes as diverse as cellular respiration and the activity of metal-based pharmaceuticals, to electrochemical reactions occurring in solar devices and fuel cells. He has published over 850 research papers and 18 books, including foundational texts in general and inorganic chemistry. He has given over 100 named lectures around the world and has been elected to numerous international academies of science.

Professor Gray is also an exceptional educator and mentor. His innovative Solar Energy Activity Lab program was selected as a leading "Citizen Science Project" by the Public Library of Science. In this program, high school students learn about the principles of solar energy capture and conversion, with many of them invited to become members of Harry's "Solar Army" and participate in university-level research over the summer at Caltech. He is a hugely popular lecturer, and events that he sponsors are notable for their celebratory and collegial atmosphere. He is also an unassuming philanthropist, donating generously to student programs and young investigator funds.

During an exemplary career spanning over five decades, Professor Gray has received countless prestigious honours and awards, from the National Medal of Science and the Pauling Medal in 1986 to the T.W. Richards Medal in 2014. His 18 other honorary doctorates come from institutions around the world, and SFU takes great pride in adding to that number. Madam Chancellor, on behalf of the Senate of this University, I ask that you now confer upon Professor Harry Barkus Gray the degree Doctor of Science, *honoris causa*.