

ACKNOWLEDGMENTS

The ambition to write a decent history of the Cavendish Laboratory at the University of Cambridge first struck me in the fall of 1985, my first semester at Harvard graduate school. As a foreign student from a non-Western developing country, South Korea, I was frightened and somewhat doubtful that I could survive in Harvard's competitive environment. Although the history of physics had long been my favorite subject for study, my experience and knowledge were naturally quite limited. For a course taught by Erwin N. Hiebert on the history of physical sciences during the twentieth century, I read an article by George P. Thomson about his father's discovery of the electron. This article, "J.J. Thomson and the Discovery of the Electron (*Physics Today* 9 (1956): 19-23)," focused on Joseph John Thomson's greatness as a physicist and his charisma as a teacher. Fascinated by this account of J.J. Thomson's charming character, I devoted my term paper to an examination of his role as director of the Cavendish Laboratory. When Professor Hiebert encouraged me to delve further into the history of J.J. Thomson's achievements, I quickly discovered that the available histories of the Cavendish Laboratory depended heavily on the reminiscences and memoirs of former directors and researchers of the Cavendish and that these histories lacked systematic analysis. I was especially bothered by the apparent consensus that an 1895 regulation change at Cambridge permitting non-Cambridge graduates to enter the University for post-graduate research was the chief cause of the Cavendish's sudden success at the turn of the twentieth century. I simply could not accept this idea. Thus began a long research project. The subject for a term paper developed into a doctoral dissertation (in 1991) and finally matured into this book, which represents a thorough condensation and revision of my dissertation along with the addition of two new chapters.

My deepest gratitude is directed to Erwin N. Hiebert and to Silvan S. Schweber. Erwin led me to this wonderful subject and has given my research efforts considerable attention ever since. I am very proud of the fact that he accepted me as his last doctoral candidate. He and Mrs. Elfrieda Hiebert offered myself and my family unfailing kindness, which was my secret source of strength as I worked to overcome many difficulties I encountered as a graduate student in the United States as well as a scholar and teacher in Korea. Sam Schweber, who generously took over the role of my dissertation advisor when Erwin retired in 1989, has looked after me ever since we met in a departmental colloquium in 1987. He read almost every word I wrote about the Cavendish and offered me incisive critiques. His encouragement was invaluable to me. It was he who urged me to publish my first paper about the Cavendish (which appeared in the *British Journal for the History of Science* in 1995) and who pushed me to extend my dissertation into a book. Sam also offered me wise counsel when I was confronted with personal difficulties after returning to

Korea in 1991. It was truly my great good fortune to have encountered—at the same point in time—two such exceptional mentors as Erwin Hiebert and Sam Schweber.

A number of other scholars contributed valuable criticism and advice to the writing of this book. Among them, I would like to especially thank Simon Schaffer, Andrew Warwick, Isobel Falconer, Peter Harman, and Jeff Hughes. I am also deeply grateful to Jed Z. Buchwald, who carefully read the entire draft of this book and recommended that I submit the manuscript to the Kluwer Academic Publishers for publication. I am very happy to see that this manuscript survived his sharp scrutiny. I also would like to express special thanks to professors and graduate students at Johns Hopkins University, where I spent my sabbatical year of 1998–1999 writing Chapters 5 and 6. Their criticisms during departmental colloquia were most helpful to me in revising and improving these two chapters. Among my friends and colleagues at Johns Hopkins, my particular thanks go to Robert Kargon, Stuart W. Leslie, and Buhm Soon Park. In addition, my heartfelt appreciation goes to several Korean colleagues who offered me encouragement to continue this project. To Judy Hardesty, who read and revised the entire draft, I offer my deep gratitude.

My sincere thanks naturally go to the institutes and libraries that made this book possible. The Korea Advanced Institute of Science and Technology partly financed my research trips to England and the United States. The American Institute of Physics provided me with a research grant to access its Niels Bohr Library. The Cavendish Laboratory, Cambridge University Library, the Imperial College Library, and the Niels Bohr Library generously permitted me to use their collections during the preparation of this book and to reproduce items from their collections. I owe a special debt of gratitude to Spencer Weart (American Institute of Physics) and Keith Papworth (Cavendish Laboratory). Cambridge University Press granted me permission to use and quote from my 1995 paper on the topic of the Cavendish Laboratory (“J.J. Thomson and the emergence of the Cavendish School, 1885–1900,” *British Journal for the History of Science* 28 (1995): 191–226). My sincere thanks also go to Jolanda Voogd and Helen van der Stelt at the Kluwer Academic Publishers.

Last, but not least, I offer my loving thanks to my wife, Soo-Yeon, to my daughters, Daye and Jinsol, and to my parents, Mr. Bo-Jung and Mrs. Soon-Young Kim, who always encouraged me to continue my research and writing and gave me heart to continue when I became exhausted. Their reaffirmation to me of the importance of family is one of the most important fruits that I harvested during the process of writing this book.

Dong-Won Kim
Korea Advanced Institute of
Science and Technology
Korea

Leadership and Creativity

A History of the Cavendish Laboratory, 1871-1919

Dong-Won Kim

2002, XXIV, 226 p., Hardcover

ISBN: 978-1-4020-0475-9