



## IN MEMORIAM

Charles A. Desoer  
Professor of Electrical Engineering and Computer Sciences, Emeritus  
UC Berkeley  
1926 – 2010

Charles A. Desoer passed away in Oakland, California, on November 1, 2010, surrounded by family. Professor Desoer was born January 11, 1926, in Brussels, Belgium, to Jean and Yvonne Desoer. During the German occupation of Belgium, he fought with the Belgian resistance, and following the liberation, he joined the Belgian army. After he obtained an Ingénieur Radio- Électricien degree from the Université de Liège in 1949, he moved to the United States, where he earned an Sc.D. in electrical engineering from the Massachusetts Institute of Technology in 1953. In 1976, the Université de Liège awarded him an honorary D.Sc.

Professor Desoer began his professional career at Bell Laboratories, Murray Hill, New Jersey, from 1953 to 1958, primarily working in the field of network theory. In 1958, he joined the University of California, Berkeley, as a professor of electrical engineering and computer sciences. He continued to serve as an emeritus professor of electrical engineering after his retirement in 1991.

In more than 100 journal papers, Professor Desoer's work focused on the analysis, design, and control of linear and nonlinear circuits and systems. His work contributed to the burgeoning growth in control applications and benefitted the aerospace, transportation, process control, and other essential industry sectors.

Professor Desoer supervised 42 doctoral students, who now occupy leadership positions in academia and industry. He was an exceptionally gifted teacher with a style that emphasized clarity of thought and elegance of presentation. He embodied this spirit in his seminal textbooks on circuit theory, linear systems theory, and feedback control, including *Linear System Theory* (with F. M. Callier, 1991); *Algebraic Theory of Linear Feedback Systems with Full and Decentralized Compensation* (with A. N. Gündes, 1990); *Linear and Nonlinear Circuits* (with L. Chua and E. Kuh, 1987); *Multivariable Feedback Systems* (with F. M. Callie, 1982); *Feedback Systems: Input Output Properties* (with M. Vidyasagar, 1973); *Notes for a Second Course on Linear Systems* (1970); *Basic Circuit Theory* (with E. S. Kuh, 1969); and *Linear System Theory: The State Space Approach* (with L. Zadeh, 1963). Some of these texts are still considered the most authoritative references in circuits, systems and control.

A much loved colleague in the Department of Electrical Engineering and Computer Sciences, Professor Desoer was known for his sharp repartee, yet he always had kind words for his colleagues. Former students and junior colleagues remember him for his dedicated mentoring and his strong emphasis on excellence in teaching.

His major awards include the Miller Research Professorship, UC Berkeley (1967-68); a Guggenheim Fellowship (1970-71); Médaille de l'Université de Liège (1970); the Distinguished Teaching Award from UC

Berkeley (1971); the Prix Montefiore from the Institut Montefiore, Belgium (1975); the Institute of Electrical and Electronics Engineers (IEEE) James Mulligan Education Award (1975); the American Association of Control Education Award (1983); the IEEE Control Society Technical Field Award (1986); the Berkeley Citation for Distinguished Achievement and for Noble Service to the University (1991); and the Gustav Robert Kirchoff Award of the IEEE (2011). This last award is being presented posthumously in recognition of Professor Desoer's crucial conceptual research contributions on the behavior and use of electrical circuits and systems. He was a life fellow of the IEEE, a fellow of the American Association for the Advancement of Science, and a member of the National Academy of Engineering, Sigma Xi, the Society of Industrial and Applied Mathematics, the American Mathematical Society, and the Mathematical Association of America.

He read widely on the history and philosophy of science, economics, and epistemology. He was a connoisseur of fine food and good music and loved to travel.

Charles Desoer is survived by his wife, Jacqueline Desoer, and three children: his son Marc with wife Barbara and daughter Catherine of Thousand Oaks, California; his daughter Michele, with daughter Raychel of Oakland, California; and his son Craig, with life-partner Dmitry Kitsov of Walnut Creek, California. His sister, Monique Bastiné-Desoer, and brother, Jean-François Desoer, as well as several nieces, great-nieces and great-nephews, all of Belgium, also survive him.

Michele Desoer  
Shankar Sastry  
2011