

## San José State University Emeritus Faculty Association Biography

**Name:** George castro

**Department:** Chemistry

**Academic Rank:** Emeritus Professor

**Year Retired:** 2004

**City of Residence:** San Jose



**Facebook Page or Website URL:**

**Birthplace:** Los Angeles

**Birth Year:** 1939

**Marital Status:** Married **Spouse or Partner's Name:** Beatrice

**Children's Names:** Gerald, Sylvia, Valerie, Cynthia

**No. of Grandchildren:** 5 **No. of Great Grandchildren:**

<b>Colleges or Universities Attended:</b>	<b>Year</b>	<b>Degree</b>
U.C.L.A.	1960	B.S. Chemistry
U.C. Riverside	1965	Ph.D. Physical Chemistry
Dartmouth College	1962-65	Research
University of Pennsylvania	1965-67	postdoctoral

**Teaching Experience:** **From** **To**

## San José State University Emeritus Faculty Association Biography

### **Administrative, Business, or Professional Experience (other than teaching):**

Postdoctoral Fellow, California Institute of Technology, 1967-68

Research Staff, IBM Almaden Research Center, 1968-95

Associate Dean, College of Science, SJSU, 1995-2004

President, Society for Advancement of Chicanos and Native Americans in Science, 1991-94

### **Selected Publications:**

Multiple Charge-Carrier Generation Processes in Anthracene, George Castro and James F. Hornig, J. Chem. Phys., Vol. 42(4), pp. 1459-60, 15 Feb 1965.

Spin Orbital Coupling and the Zeeman Effect in Molecular Crystals, George Castro and Robin M. Hochstrasser, Solid State Comm., Vol 3(12), pp. 425-28, 1965.

Singlet-Triplet Absorption of Crystalline Naphthalene by High Resolution Photo-Excitation Spectroscopy, George Castro and G.W. Robinson, J.Chem.Phys., Vol. 50(3). pp. 1159-64, 1 Feb. 1969.

Photoconduction in Aromatic Hydrocarbons, George Castro, IBM Journal of Research and Development, Vol 15(1), pp. 27-33, January 1971

Exciton Induced Photoemission in Anthracene, D. Haarer and G. Castro, Chem. Phys. Letters, Vol 12(2), pp. 277-280, 15 Dec. 1971

Photochemical and Non-Photochemical Hole Burning in Dimethyl-s Tetrazine in a Polyvinyl Carbazole Film, E. Cuellar and G. Castro, Chemical Physics, Vol. 54, pp. 217-225, (1981)

### **Personal Commentary (please limit comments to one page):**

I came to San Jose in 1968 and spent most of my professional life at IBM Research before joining SJSU in 1995 as an Associate Dean in the College of Science. During my tenure at IBM, I had many professional and personal interactions with SJSU Faculty over the years. I served on the President Bunzel's Advisory Board in 1975, and as a manager in IBM, I hired dozens of science and engineering students from SJSU as both part-time assistants and full time technicians. I was proud to join the CSU system which I remember someone describing as "the main engine of the State of California for the upward social and economic mobility of low and middle income people."

I was fortunate to get involved in K-12 education very early after coming to San

## **San José State University Emeritus Faculty Association Biography**

Jose, and actually taught mathematics, using manipulatives and games, to first grade and kindergarten classes at Olinder School near the SJSU campus during my lunch hour. I made many presentations to 4<sup>th</sup> grade classes on the contributions of Mexicans to mining technologies and the history of the Almaden mercury mines. My interest in K-12 education increased after I became a national officer ( Secretary in 1987, President in 1991) of SACNAS, the Society for Advancement of Chicanos and Native Americans in Science, which brought me in contact with national leaders involved in the systemic reform of math and science teaching, including "Equity 2000", the College Board's effort to improve high school mathematics in San Jose and several other major cities.

Very soon after joining SJSU in 1995, I was able to secure Federal funding for several partnerships with local K-12 school districts to improve math and science teaching. In partnership with other SJSU faculty in other disciplines, we secured funding to develop community learning centers in the schools near the SJSU campus. These efforts also provided excellent employment and learning opportunities for our SJSU students.

I retired in 2004 but came back to SJSU on a part time basis to run a cooperative program with Evergreen Valley College to help their Hispanic Students transfer to SJSU and to persist to the baccalaureate degree. This effort sponsored the development of a new course at SJSU, "Science 90T - Success as Transfers", which is offered to transfer students from all majors and from all community colleges.

**Date Completed:** May 31, 2010