

It is my very great pleasure to introduce this evening's speaker, the new Imaging Hall of Fame laureate George E. Smith.

I had a hard time locating Dr. Smith to see if he would be willing to give tonight's talk. First, I found his partner Willard Boyle in the online Nova Scotia white pages and Dr. Boyle then put me in contact with George Smith. The ironic thing is that I was performing this search during my summer vacation down at the New Jersey shore and it wasn't until I returned to Rochester that I learned that all the time, Dr. Smith was within a short bike ride of where I was down in New Jersey.

George Smith was born in White Plains, New York, in 1930. He received his B. A. in Physics from the University of Pennsylvania in 1955, an M. S. and Ph. D. in Physics from the University of Chicago in 1956 and 1959 respectively. Following graduation, he joined the famous Bell Laboratories where he initially studied the electrical properties and band structures of semimetals largely through microwave resonance experiments and investigations of a variety of magnetothermoelectric and galvanomagnetic effects. In 1964 he became Head of the Device Concepts Department at Bell Labs, a group formed to devise next generation solid state devices. In this capacity, he was involved in a variety of investigations including junction lasers, semiconducting ferroelectrics, electroluminescence, transition metal oxides, the silicon diode array camera tube and, of course, Charge-Coupled Devices which we know as CCD's.

The Charge Coupled Device is Smith's major technical accomplishment that he conceived along with Willard S. Boyle in 1969. They hold the basic patent and published the first paper disclosing the device concept accompanied by a paper on its experimental verification. A following invention of the Buried Channel Charge Coupled Device significantly improved the performance of the original CCD. Their accomplishment has been recognized through many awards over the years including this evening's inauguration into the Imaging Hall of Fame.

Dr. Smith comes to us tonight to give us his first-hand perspective on the invention and early history of the CCD. It is my honor to give you George E. Smith ....