

Roger Crouch received a BS degree in Physics from Tennessee Tech in 1962 and a Masters and PhD in Physics from Virginia Tech in 1968 and 1971, respectively.

After graduation from Tenn Tech, he worked at the NASA Langley Research Center. Initially he worked on heat shield materials to protect spacecraft such as the Gemini and Apollo as they reenter the earth's atmosphere. In 1964 he moved into research dealing with the electronic properties of various materials including advanced semiconductor materials. In 1970 he moved into pioneering research on flat panel displays based on plasma panels, liquid crystals and light emitting diodes. His thesis work was on the electrical and optical properties of various impurities in silicon and advanced materials systems. His work in these fields up until 1985 lead to the publication of over 40 technical papers and over 50 technical conference reports. He was awarded three patents and 12 advanced technology awards.

In 1985 he moved to NASA Headquarters as the Chief Scientist for what became the Microgravity Sciences Division. He managed the science program as it grew from about \$10 million with about 60 funded scientists until it was over \$200 million and close to 1000 funded scientists in 1996 when he relinquished this position. During this time he served as the Program Scientist of 5 different space shuttle flights. He was instrumental in the establishment and served as co-Chair of cooperative microgravity science working groups between NASA and Canada, European Space Agency, France, Germany, Japan and Russia.

In 1996, he left NASA to train and fly as a payload specialist on NASA Space Shuttle flights STS 83 and STS 94 in 1997. The first mission in April was plagued with mechanical problems and was aborted on the fourth day as a Minimum Duration Mission after 61 orbits of the earth. The crew and Columbia orbiter returned to space in July of 1997 to carry out the complete 16 day mission, completing 251 orbits of the earth and carrying out numerous tests for 35 different scientific experiments on board the Columbia. Prior to this experience he served as a backup payload specialist for Shuttle flight STS 42 which flew in 1992.

In 1998 he returned to NASA Headquarters as a visiting scientist from M.I.T. to serve as the chief scientist in the Office of Life and Microgravity Sciences. In 2000, he took over at the Chief Scientist of the International Space Station until 2004. From 2004 he was the University Affairs Officer for the Office of Exploration.

He is currently retired from NASA and MIT. He does some consulting work and gives talks around the world on NASA technology developments and inspiring students of all ages. He also serves: on the Board of Advisors of the Coalition for Space Exploration; as a member of the Roundtable for College of Science at VA Tech; and on the Board of Directors-Millard Oakley STEM Center at TN Tech.