Scott S. Harris ’82

Scott Harris, described as a visionary and key thought leader in the industry of computer-aided design, you embody the WPI ideals of ingenuity, invention, and innovation.

Since the early 1980s, you have worked in engineering and design automation software development. As a co-founder of SolidWorks Corporation and vice president of the New Product Concepts Group, you led the team that developed products and prototypes that pushed the boundaries of user-interface, surface representations, and modeling metaphors. Your work has resulted in one of the most innovative and successful CAD products ever created. Today, more than 1.7 million product designers and engineers worldwide, representing thousands of organizations, use Solidworks to bring their designs to life.

Prior to Solidworks, you led product definition and geometry development teams for 10 years at Computervision, an early pioneer in the CAD industry. You began your career at Pratt & Whitney Aircraft, designing, analyzing, and testing jet engine components and developed innovative computer techniques to define and evaluate aerodynamic surfaces for jet engine nacelles.

Today, your record of ingenuity and innovation continues through your involvement with several start-up companies in the fields of computer-aided design, 3D printing, interactive 3D displays, hybrid automobiles, and Alzheimer’s patient tracking. You have published on geometric modeling and share a patent in surface modeling geometry. You share WPI’s commitment to solving problems of consequence to communities around the globe. An advocate for social action, you work tirelessly to promote education, engineering, and entrepreneurship in developing countries. In Rwanda, you established a small company called Gasabo 3D, which provides a career pathway for local students. You also helped develop and advise the Rwanda Innovation Endowment Fund, a United Nations–sponsored program that helps Rwandan entrepreneurs build solid companies. You mentor engineering, business, and design students here at home, you serve as a board member of the Central Mass Search and Rescue Team, and you are co-founder of Team SolidWorks, a cycling organization that has raised millions of dollars for cancer research.

Scott Harris, your remarkable career and commitment to social action are the expression of the very best of a WPI education. We are proud to recognize you with the Robert H. Goddard Award for Outstanding Professional Achievement.

Rene B. LaPierre ’67 ’71 MS, ’74 PhD

Rene. LaPierre is well-remembered for his pioneering research in chemical engineering. Although the WPI community was saddened to lose this distinguished alumnus in 2006, we are proud to honor him today among his family and friends.

Dr. LaPierre earned his bachelor’s, master’s, and doctoral degrees at WPI, all in chemical engineering. He was a flight navigator in the Air Force from 1969 to 1972 and then spent 23 years at Mobil serving in a number of leadership positions.

As manager of Mobil’s Exploratory Catalytic Process Group, Dr. LaPierre became known as a visionary for his work in catalytic processing for lubricant production. Under his leadership, this program established the key principles of what is now accepted as the route to produce Group II+ lubricant-base stocks, which have become a significant share of the base stock market. He engaged many researchers within Mobil, and his efforts eventually led to the commercialization of Mobil’s MIDW (isomerization) and MSDW (dewaxing) processes for the production of premium lubricants.

His work also was instrumental in the conceptualization and development of a two-stage xylene isomerization process. This body of work became the basis for Mobil’s Advanced Xylene Isomerization Process, which was commercialized in the late 1990s, as well as the foundation for other critical advances in chemical processes.

As manager of Mobil’s Catalyst Characterization Group, he demonstrated his scientific versatility in engaging some of the best zeolite crystallographers of his generation to resolve the structure of several zeolites.

Demonstrating the depth of his technical versatility, he led studies in the area of fuel cells just prior to the ExxonMobil merger. This work ultimately led to a joint program with Ford to construct a prototype gasoline reformer.

At the time of the Exxon and Mobil merger Dr. LaPierre became vice president of engineering for Precision Combustion Inc. (PCI) in 2000, a small business developing advanced catalytic reactors for a range of energy application. In this last position, he led a group of PhDs and other engineers developing novel catalytic combustors, compact fuel processors, and compact catalytic burners. At PCI he successfully developed his new team, tackled new challenges, and developed a new set of friendships, passing on his love of technology and his professionalism to another generation of innovative engineers.

He was a prolific technologist—the first of his 39 U.S. patents was issued in 1980. He also published more than 20 articles detailing his and his teams’ work.

Rene LaPierre is remembered in many ways, all fitting: talented researcher, effective manager, generous mentor and friend, and loving husband and father. Today we remember and honor him as an exceptional WPI alumnus whose research and leadership has made a significant impact on his field and in the world.