



Contacts

Trinity College Alumnus and Trustee Eric R. Fossum Wins Largest Engineering Prize

Queen Elizabeth Prize for Engineering Honors Engineers Whose Innovations Benefit Humanity

Hartford, Connecticut, February 8, 2017 – [Eric R. Fossum '79, H'14](#), professor of engineering at the Thayer School of Engineering at Dartmouth, has been awarded this year's prestigious Queen Elizabeth Prize for Engineering for the invention of image sensor technology that is at the heart of every digital camera.

Invented by Fossum at the NASA Jet Propulsion Laboratory to miniaturize cameras in space, the modern image sensor is now ubiquitous, used in personal visual communications, entertainment, automotive safety, medicine, science, security, defense, and social media. More than 3 billion cameras are made each year using CMOS (complementary metal oxide semiconductor) image sensors, some in standalone cameras and even more embedded in products such as smartphones and automobiles.

The largest engineering award in the world, the Queen Elizabeth Prize for Engineering, introduced in 2011, is a global prize of 1 million British pounds that celebrates engineers whose innovations have been of global benefit to humanity.

Fossum, a member of Trinity's Board of Trustees, earned a B.S. in physics and engineering from the College and an M.S. and Ph.D. in engineering and applied science from Yale University. Trinity granted him an honorary doctor of science degree in 2014. Recently named associate provost for Dartmouth's Office of Entrepreneurship and Technology Transfer, he teaches several undergraduate and graduate courses, advises a large group of Ph.D. students, and is director of the Ph.D. Innovation program. Fossum was inducted into the National Inventors Hall of Fame, is a member of the National Academy of Engineering, is a Fellow of the National Academy of Inventors and the Institute of Electrical and Electronics Engineers, and was named by the American Association for the Advancement of Science as an AAAS-Lemelson Invention Ambassador.



Fossum was interviewed by *The Trinity Reporter* in 2011, shortly after he was inducted into the National Inventors Hall of Fame. He spoke about his experiences at Trinity and what it was like to study engineering at a liberal arts college. "It is sometimes hard to explain to students (and faculty) in conventional liberal arts that engineering is a very creative field," Fossum said. "People tend to think about the math and physics behind engineering as the core elements, but actually they are just tools engineers utilize to invent creative solutions for society. I think the goal of graduating broadly educated, free-thinking engineers fits in rather well with a liberal arts environment."

Three others whose earlier inventions contributed to Fossum's innovative image sensor also were honored with the Queen Elizabeth Prize for Engineering. They are Nobukazu Teranishi, research professor at University of Hyogo and Shizuoka University, Japan, and Michael F. Tompsett and Nobel Laureate George E. Smith, both retired scientists from Bell Labs.

To read the *Time* article on Fossum's award, please click [here](#).

For more information on Trinity's ABET-accredited Engineering Department, please click [here](#).



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