# 2005 Intel International Science and Engineering Fair Awards Announced

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Projects on a navigational system for the blind, possible discovery of an ancient coastline on Mars and a lower-cost technology to analyze compounds used to protect against disease were the student projects that won top awards today at the 2005 Intel International Science and Engineering Fair (Intel ISEF). The students - Ameen Abdulrasool, Chicago, Ill.; Gabrielle Alyce Gianelli, Orlando, Fla.; and Stephen Schultz, Gelsenkirchen, Nordrhein-Westahlen - were among 1,447 who competed at the 56th annual international event.

“Intel ISEF reflects what can happen when students are encouraged to pursue a passion and investigate the world around them,” said Craig Barrett, Intel CEO. “It’s truly inspiring to see what today’s award winners have accomplished. I have faith this new generation of young scientists and engineers will help cure diseases, protect the environment and develop breakthrough technologies that will one day change the world.”

Abdulrasool, 18, won a top prize for his Behavioral and Social Sciences project, “Prototype for Autonomy: Pathway for the Blind.” Abdulrasool developed a self-contained navigational system for the visually impaired that combines GPS technology, verbal directional signals, and vibratory signal devices worn as bracelets. Abrulrasool’s project was inspired by his father, who is blind.

Gianelli, 17, won a top prize for her Space Science project, “Fractal Dimension Analysis of Putative Martian Coastlines.” Gianelli used a topographic map of Mars and statistical methods to analyze geologic

features that could indicate an ancient ocean coastline. She believes that understanding more about the geologic history of Mars will help foster a better understanding of Earth's geology.

Schulz, 19, won a top prize for his Chemistry project, "From Synthesis to Analysis of Radical Inhibitors." Schulz developed new electrochemical methods to analyze flavonoids, strong radical inhibitors that may combat cancer and other diseases. He miniaturized his process to create an inexpensive "lab on a chip" that has the potential for widespread use in research.