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KATY TEEN AWARDED \$10,000 FOR DEVELOPMENT TO IMPROVE STABILITY OF NEXT-GENERATION MATERIALS

Kevin Yao to be Named a 2020 Davidson Fellow Scholarship Winner

Katy, Texas – The Davidson Fellows Scholarship Program has announced the 2020 scholarship winners. Among the honorees is 18-year-old Kevin Yao of Katy. Yao won a \$10,000 scholarship for his project, *A Novel and Feasible Method to Detect and Prevent the Ambient Degradation of Two-Dimensional MoS₂ Structures*. He is one of only 20 students across the country to be recognized as a scholarship winner.

“It is a great honor to be named a Davidson Fellow,” said Yao. “I am dedicated to pursuing a lifetime of questioning and research, and to be recognized confirms that my efforts are on the right track towards making the world a better place.”

For his project, Yao studied the fundamental physical properties of next-generation materials and developed a new protocol to prevent the ambient degradation of MoS₂ monolayers (a single layer of molybdenum disulfide). These monolayers have remarkable semiconducting and optical properties, in addition to possessing superior strength, flexibility, and relative stability. Those materials promise new applications in electronics and optoelectronics, but their long-term instability in air has been a large obstacle in these applications.

Yao will be attending Texas A&M University in the fall where he will be studying electrical engineering.

“We are proud to announce the 2020 Davidson Fellows Scholarship recipients and applaud them for their hard work and achievement in their fields of study,” said Bob Davidson, founder of the Davidson Institute. “By being awarded this recognition, these students have shown immense skill and work ethic, and they should be commended as they continue their educational and research journeys while continuing to work to solve some of the world’s most vexing problems.”

The 2020 Davidson Fellows will be honored during a digital reception on September 30, 2020.

The Davidson Fellows Scholarship program offers \$50,000, \$25,000 and \$10,000 college scholarships to students 18 or younger, who have completed significant projects that have the potential to benefit society in the fields of science, technology, engineering, mathematics, literature and music. The Davidson Fellows Scholarship has provided more than \$8.2 million in scholarship funds to 366 students since its inception in 2001, and has been named one of the most prestigious undergraduate scholarships by [U.S. News & World Report](#). It is a program of the Davidson Institute for Talent Development, a national nonprofit organization headquartered in Reno, Nev. that supports profoundly gifted youth.

About the Davidson Institute

Founded by Bob Davidson in 1999, the Davidson Institute for Talent Development recognizes, nurtures and supports profoundly intelligent young people, and provides opportunities for them to develop their talents to make a positive difference. The Institute offers support through a number of programs and services, including the Davidson Fellows Scholarship and the [Davidson Academy of Nevada](#). For more information about the 2020 Davidson Fellows, please visit www.DavidsonGifted.org/Fellows-Scholarship.

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High-resolution photos are available at www.DavidsonGifted.org/Fellows-Scholarship.