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SAMPE FOUNDATION

The charitable fund of SAMPE

Mission Statement

Instilling an interest and passion for advanced material and process engineering in the next generation of leaders is a vital part of the foundation's mission. In order to realize this vision, the SAMPE Foundation promotes education and innovation in the fields of materials and processes on a global basis, particularly at the kindergarten through the 12th-grade level. The SAMPE Foundation provides grants to stimulate an interest in and provide access to the tools required for future technological growth in science, technology, engineering and math (STEM).

PLEASE NOTE: THE DEADLINE FOR SUBMISSION OF 2021 NOMINATIONS FOR SAMPE FOUNDATION GRANTS IS FAST APPROACHING: 31 MARCH 2022

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Programs: The SAMPE Foundation has a two-pronged approach to supporting K-12 STEM education. The first approach is by supporting leading educators in the STEM field, via the William Dahlgren Teacher of Excellence Award. The second approach involves providing direct support to worthwhile STEM programs around the world, via our Special Awards program.

1. William Dahlgren Teacher of Excellence Award

The William Dahlgren Award recognizes outstanding K-12 teachers for inspiring students in math, science and engineering fields, particularly classes directed towards learning the field of plastics and general entrepreneurship activities/efforts. The teacher is nominated by an administrator who has knowledge of the teacher's direct work product in the classroom in STEM. The teacher receives a Certificate of accomplish and a monetary Honorarium from the Foundation.

This spring The SAMPE Foundation approved eight Dahlgren Awards to teachers across the country.

Melissa Arisco	Union Hill School	MA
Ken Mattern	Cactus High School	AZ
Adam Shroyer	Cactus High School	AZ
Eric Harrington	St. Margaret's Episcopal School	CA
Lily Lavapiez	Sanders Middle School	AZ
Nic Jones	R212	SC
So Jung Kim	Christ Lutheran	CA
Chris Washington	Pacific Lutheran	CA



Photo (L to R): J. Ingalls SAMPE Foundation, Ken Mattern of Cactus High School in Peoria, AZ. Ken received the award for his teaching in Cyber Security at the high school level.



Photo (L to R): J. Ingalls SAMPE Foundation, Adam Shroyer of Cactus High School in Peoria, AZ. Adam received the award for his teaching in Robotics at the high school level.

2. Special Grant Awards Program

As a part of the SAMPE Foundation's outreach efforts, the board is now accepting grant proposals for programs and projects that will positively impact K - 12 STEM-related learning around the world. These grants are carefully reviewed by the foundation's board, with the primary goal of understanding the clear benefits of the proposed STEM program.

This spring, the Foundation presented five grants for STEM programs.

1. Worcester Polytechnic Institute (2)
2. Sanders Middle School
3. Cactus High School
4. Wendell Phillips High School

Two Grants went to Worcester Polytechnic Institute for female student training. A grant was approved for Wendell Phillips HS in inner city Chicago for needed classroom equipment. One was awarded to Cactus HS to help purchase equipment for the Robotic course. This year a grant was approved for Sanders Middle School in Sanders, AZ. This school is on the Navajo Reservation to help purchase computer equipment for the classroom. Presently the school has no computers. Most of the schools that were awarded funding are Title 1 schools. The Title 1 program provides supplemental funds to school districts to assist schools with large concentrations of low-income students to help meet their educational goals. A school must be served if the poverty level is 75%.

The Foundation awarded a total of \$27,650 to the Special STEM programs.



Photo: Ms. Kristi Hammer, Principal Cactus High School. J. Ingalls SAMPE Foundation.

3. Key Supporter Profile to SAMPE Foundation

Each Newsletter we will profile a major contributor or member of the SAMPE Foundation Board.

WILLIAM DAHLGREN



William Dahlgren has been a key supporter of STEM education and a major contributor to the SAMPE Foundation for many years. He and his family have funded the William Dahlgren Teacher of Excellence in STEM. The SAMPE Foundation accepts nominations from school administrators. The Board of Directors reviews and approves the awards for the STEM teachers from both public and private schools. Below is Williams (Bill) Dahlgren's story.

The William Dahlgren Story began in 1973 when Airtech International Incorporated was formed in San Bernardino, California by Mr. Bill Dahlgren. The main goal of the business was to distribute vacuum bagging and composite tooling materials to make fiberglass and graphite parts for the aerospace industry. With only four employees and a rented 5,000 ft² (465 m²) building, Mr. Dahlgren had an idea to create a company that offered a "one stop shop" for everything needed to produce aircraft bonded and composite parts. Soon after they moved to a small building in Torrance, CA. By 1977, Airtech grew from a 10-person company to a company with sales throughout North America, Western Europe, and Japan. During this time, Bill decided to manufacture unique films to compete in the industry. By 1979, Airtech had two buildings in Carson occupying 35,000 ft² (3,300 m²) of building space and 45 employees strong. Over time, Airtech continued to expand and in August of 1998, Airtech built a brand new 140,000 ft² (13,000 m²) building and moved to its current location, Huntington Beach, CA.

As advanced composites grew, so did Airtech, investing in equipment to become a manufacturer of these materials and expanding into industries other than aerospace. These new markets included composite processing materials used for large blades in wind energy production, marine, automotive, auto racing, solar energy, body, and vehicle armor.

Not only had Airtech expanded to different industries, Airtech's vision of a "one stop shop" extended as materials were offered for a variety of processes: vacuum bagging, wet lay-up, and resin infusion. The product range consisted of vacuum bagging films up to ultra-high temperatures and very large widths, release films, peel plies, breathers and bleeders, release liquids, pressure sensitive tapes, vacuum bag sealant tapes, vacuum bag connectors, hoses, rubber, tooling materials, carbon and glass reinforcements.

Airtech was growing at a fast pace and to provide future growth internationally, Airtech decided to open its first international facility in Europe. In 1991, Airtech Europe opened its facility in Differdange, Luxembourg. The company started with 6 people and a 35,000 ft² (3,300 m²) building. As business grew, Airtech also opened facilities in Differdange, Luxembourg, Rochdale, England (1996); Tianjin, China (2007); Chino, California (2009); Springfield, Tennessee (2014) and its corporate headquarters in Huntington Beach, California (1998).

Today, Airtech has over 800 employees worldwide and is the largest privately owned manufacturer of vacuum bagging and composite tooling materials in the world. Airtech continues to seek new opportunities for development of production technologies, as well as using different manufacturing methods, and expanding its' facilities for growing markets. Airtech's achievement is mainly due to the owner, Bill Dahlgren who's been a pioneer in this industry and at a senior age, he is still very involved and calls on key customers worldwide. His knowledge, direction, and enthusiasm are an inspiration to all at Airtech and in the composite industry worldwide.

The William Dahlgren Award for Teaching Excellence in STEM has had a major impact on education. Since 2012 the SAMPE Foundation has awarded a total of Seventy Eight (78) Dahlgren Awards. This would not be possible without the generous support of Bill Dahlgren and Airtech Corporation. The STEM teacher is presented with a formal certificate of performance and a \$500 Honorarium.

HOW YOU CAN HELP?

You can help STEM programs by donating to the SAMPE Foundation. The SAMPE Foundation is a 501.3c tax exempt organization. For more information paste the link to your browser. Help our mission for STEM Education.

Click the link to make a donation:

<https://www.nasampe.org/donations/donate.asp?id=12510>