

2017 ANNUAL REPORT



CERAMIC AND GLASS INDUSTRY FOUNDATION



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Message from the Board of Trustees Chair, Ted Day

It's been an exciting year at The Ceramic and Glass Industry Foundation! With the help of our generous donors, we've been able to expand our programs and start to sponsor ceramic and glass science education projects all over the world. Partners in China, India, Japan, and the United States are introducing more students to ceramics and glass materials than ever before. We also reached a significant milestone this year - receiving the remainder of the \$1 million matching gift fund from The American Ceramic Society. Every dollar donated to the CGIF over the past four years has been graciously matched by ACerS. Going forward, the Society remains committed to the CGIF and will continue to cover the Foundation's administrative and fundraising costs. That means that 100% of donor gifts will support programs that attract and train the next generation of ceramic and glass professionals. Thank you for being an important part of the CGIF's success!



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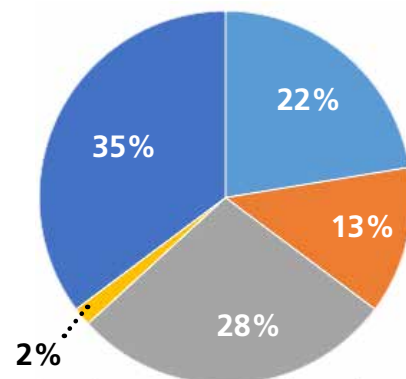
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2017 Program Expenses

Student Exchanges and Travel Grants	\$ 56,000
Student Leadership Development	\$ 32,000
Student & Educator Outreach	\$ 70,000
University-Industry Network / Keramos	\$ 4,000
External Project Grants	\$ 88,000

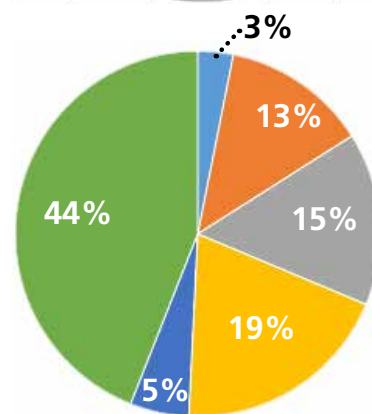
Total Program Expenses **\$250,000**



2017 Funding Sources

Program Revenue	\$ 18,000
Individuals	\$ 74,000
Foundations	\$ 88,000
Corporations	\$112,000
Endowment Fund Earnings	\$ 30,000
ACerS Matching Gifts	\$253,000

Total Funding **\$575,000**



Programs of The Ceramic and Glass Industry Foundation

The CGIF is proud of its many programs that were created to attract, inspire, and train the next generation of ceramic and glass professionals.

Materials Science Classroom Kit - Originally developed by ACerS President's Council of Student Advisors, the kit is used by teachers to introduce 7th-12th grade students to the basic classes of materials.

Student Travel Grants and Exchanges - In cooperation with the European Ceramic Society (ECerS), each year the CGIF provides U.S. students with travel grants to attend the ECerS annual summer school, which took place in 2017 in Budapest, Hungary. ECerS provides European students with grants to attend the CGIF's Winter Workshop, which takes place in January of each year.

Student Leadership Development - The CGIF is proud to support the President's Council of Student Advisors (PCSA) by offering opportunities to learn and grow as young leaders.

University-Industry Network - This unique program encourages schools around the world to continue



2017-2018 PCSA Delegates with 2017 ACerS president, Bill Lee.

teaching key concepts in ceramic and glass science by providing financial and programmatic resources to key professors at participating universities.

The Ceramic and Glass Career Center - Our online resource for job and internship seekers to find the right position for them and for employers to find the best and brightest materials students and professionals.

Student and Teacher Outreach - The CGIF attends a variety of student and teacher events each year to stimulate interest in materials science and our Materials Science Classroom Kit. Such events include the National Science Teachers Association conferences, the Ohio State Fair Technology Day, and the Materials in STEM Conference.

Generous Sponsors Help Classroom Kit Distribution Reach New High

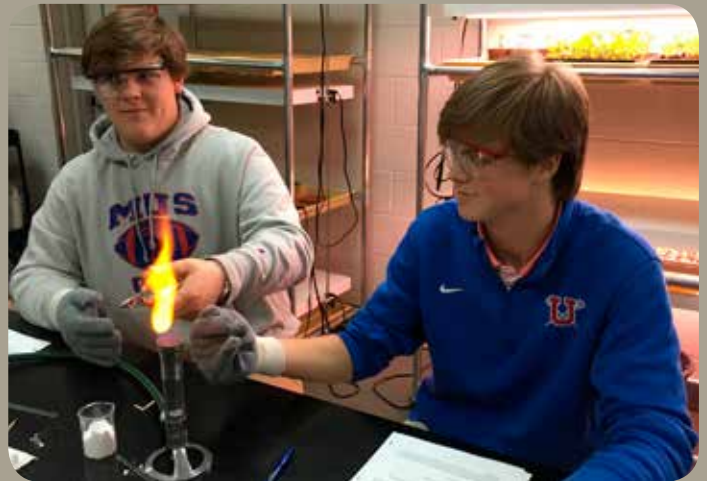
The redesigned version of the Materials Science Classroom Kit, which launched in October 2016, was distributed to nearly 250 teachers across the United States in 2017! That number is up from 107 in 2016, and we believe the increase is due to the generosity of individual and corporate members who have sponsored kits to be donated to classrooms.



In most U.S. schools, teacher resources are limited, and many cannot afford to purchase a kit for their classroom. But with the help of our donors, there was a significant increase in the number of kits we were able to distribute to 7th-12th grade classrooms throughout the U.S.

The appreciation expressed by recipient classrooms cannot be overstated. "I love the supplies provided in the kit and the availability of replacement materials," explained Analice Sowell of Memphis University School. "My students are interested in studying STEM fields in college, so the explanations and background information given in the Teacher's Manual really helps me take it to the next level."

The Materials Science Classroom Kit is also being used at the college level to introduce Materials Science. According to Dr. Casey Schwarz, who is teaching a special topics course in Materials Science at Ursinus College in Pennsylvania, "I found it easy to incorporate the Materials Science Classroom Kit into our classroom activities. For example, I placed the students in small groups to do the 'Engineered Concrete' project. They were all very actively engaged, asking interesting questions about engineered materials and composites. They were so invested in the project that they asked if they could have another shot at making stronger materials at the end of the semester."



Students at Memphis University School performing a lab from the Materials Science Classroom Kit.

"This kit provided me with another piece of the puzzle to make this course a continually strong STEM preparation for our students. I'm really happy I found your kit, and I look forward to doing even more of these experiments with my next group of students next year."

-- Analice Sowell



Ursinus College students formulating composite mixtures for concrete pucks.



Students at Chesterton Academy of Milwaukee discuss thermal conductivity using the refractory brick from the Materials Science Classroom Kit.

"The chemistry students in my class study the different properties of matter, and it is very useful to have materials that one encounters in daily life that help students conceptualize the properties of different materials. The Materials Science Classroom Kit has been very useful in making this objective a reality."

--Bernoli I. Baello, teacher at Chesterton Academy of Milwaukee

"Two kits were generously donated from The Ceramic and Glass Industry Foundation and the money to purchase additional kits was provided through an internal grant at Ursinus College. We absolutely love the kits and I would recommend them to other teachers. I am eager to bring kits into more classrooms including the high school and middle school classrooms that we visit."

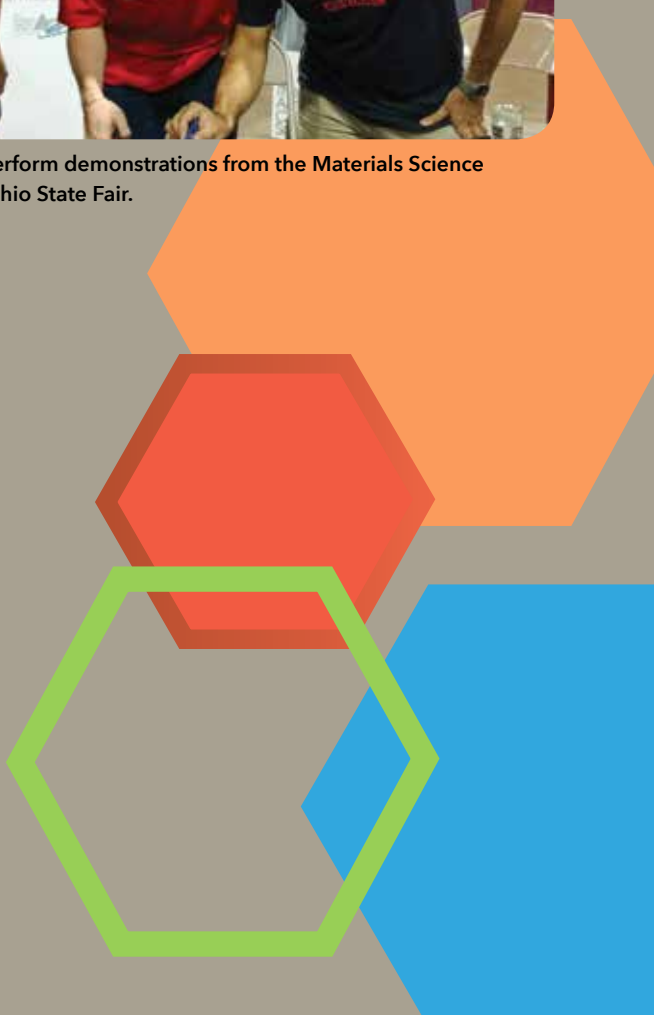
--Dr. Casey Schwarz



Ohio State students perform demonstrations from the Materials Science Classroom Kit at the Ohio State Fair.



A student volunteer demonstrates for teachers a project from the Materials Science Classroom Kit.



US and International Programs Benefit from CGIF Outreach Grants

The CGIF actively seeks organizations, both domestic and abroad, who are launching a new materials outreach program or have exciting ideas to improve an existing program or event. The Foundation offers grants to engage students with learning experiences and events that inspire an interest and understanding of ceramic and glass science and engineering.

In 2017, the Foundation provided grants of more than \$85,000 for outreach programs being developed or expanded by such organizations as the Indian Ceramic Society, the Chinese Ceramic Society, the Berks County (PA) Science Research Institute, and the ENLACE Program operated through the University of California, San Diego, to name a few.

The grant provided to the Berks County (PA) Community Foundation/ Conrad Weiser Science Research Institute will fund a materials science research project by middle and high school students and help grow the summer research institute. It will also allow the district to add at least four students from outside the school district for the five-week summer program.

"We're excited to be bringing more people into what we're doing," said Adelle Schade, project lead and a Conrad Weiser science teacher. "The recognition by the foundation was really an honor for us. They are an international foundation. It brings a lot of notoriety to the school area and gets our name out globally."

Another grant recipient, the Indian Ceramic Society, organized two two-day workshops, one in Kolkata and one in New Delhi, entitled "Awareness Workshops on Ceramics, Glass, and Allied Materials." A total of 213 students took part and reported that the experience was extremely beneficial.

"This is to extend our heartfelt thanks and gratitude for giving our students an opportunity to

participate in the CGIF Awareness workshop. We felt very privileged to be a part of this and were overwhelmed by the meticulous arrangements of the two days," explained Mitali Kundu, Headmistress of Bethune Collegiate School in Kolkata.



Student participants in the ENLACE 2017 program.

A unique bi-national program that received a CGIF grant was the ENLACE 2017 summer high school and undergraduate research program at UC, San Diego. ENLACE is a seven-week residential program for students interested in science and engineering, with the goal of encouraging participation in research at an early

age. The students, from both Baja California and San Diego, are organized in pairs, one from each side of the border, and work together in research laboratories across the UC, San Diego campus.

According to student participant Miranda Douriet, a high school student from Baja California, Mexico, "I used to have a different perspective on ceramics and glass. Without the ENLACE Program, I would never have had the opportunity to learn about them. This experience helped me to determine the type of career I want to have."

In a different way of doing outreach, the Foundation partnered with MSE Supplies to provide a new ball milling system to a U.S. university with a materials science and engineering program where ceramics, glass, nanomaterials, and other powder processing is part of the education program. The Department of Chemical Engineering and Materials Science at the University of California, Irvine, was selected to receive the new equipment.

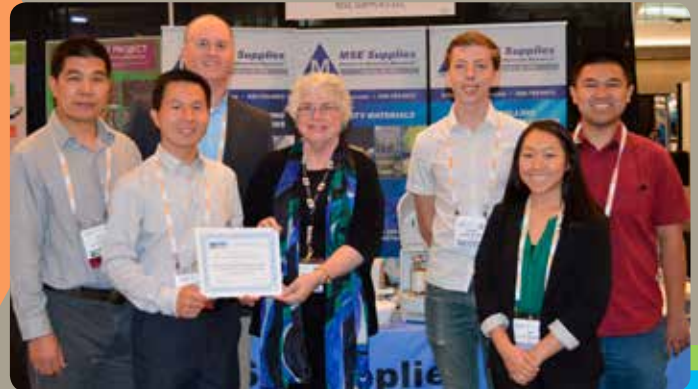
To read more about the CGIF's grants and other grant recipients, visit <http://foundation.ceramics.org/cgif-news-2>

Winter Workshop Brings US and International Students Together

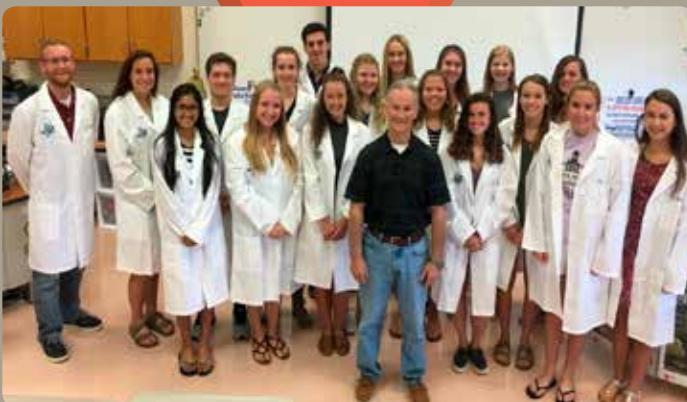


The 2017 ACerS Winter Workshop took place Wednesday, January 18 through Sunday, January 22, 2017, at the DoubleTree by Hilton at SeaWorld Conference Hotel in Orlando, Florida.

The annual event is designed for ceramic and glass students and young professionals from around the world. The European Ceramic Society provided 15 travel grants for international students. The workshop provides a combination of technical and professional development sessions, outstanding networking opportunities, and this year concluded with a tour of the Kennedy Space Center.



From left: Hui Du and Sumin Zhu of MSE Supplies, Marcus Fish of the CGIF, Dr. Martha Mecartney, and students Thomas Kaufman, Mai Tser Yang, and Andrew Nguyen of UC, Irvine.



Students from the Science Research Institute at Conrad Weiser High School this past summer pose for a photo with CGIF Board Chair, Ted Day.

The Ceramic and Glass Industry Foundation and The American Ceramic Society gratefully acknowledge all who made donations in 2017. We are thankful that your generosity enables us to make a difference in the lives of others and to attract, inspire, and train the next generation of ceramic and glass professionals!

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