



## MRS University Chapter Special Project Awards

[mrs.org/chapters-special-projects-program](https://mrs.org/chapters-special-projects-program)

The Materials Research Society (MRS) University Chapters Program is a network of students from universities around the world that fosters an environment of collaboration and open exchange of ideas across all scientific disciplines.

Each year, MRS offers current University Chapters an opportunity to organize community events that broaden awareness of materials science education by way of the University Chapter Special Projects Program. Grant funding is dedicated to supporting projects proposed by Chapters, and projects are evaluated against the following criteria:

- New initiatives rather than a continuation or expansion of a present activity.
- Project addresses a well-defined need.
- Deliverables are clearly stated with desired outcome.
- Timeline and plan for successful completion are clear and realistic.
- Funding request and proposed budget are reasonable.
- Deliverables are potentially useful to other University Chapters or to MRS in general.

The Chapter must be active and in good standing. Funding ranges from USD\$250–\$1,000 per project. The following are Chapters that have received University Chapters Special Projects Grants in 2020.

### California State University, Chico

#### *Materials Research Symposium*

With the support of MRS University Chapters Special Projects Grants, the California State University (CSU), Chico, MRS Chapter is arranging their first annual symposium. The purpose of this event is to invite and inform undergraduate students about the myriad opportunities within materials science. The symposium will include talks, as well as student research presentations and elevator pitches (judged by faculty), which will support students in networking with faculty and sponsors, provide opportunities for prizes, and better prepare them for careers in academia and industry. Additionally, students will be able to compete in a “Science as Art” competition, which is designed to introduce students to the craft and visualization of the

microscopic canvas. CSU Chico hopes to expand this to an annual event, which will reach not only their campus, but also local high-school and middle-school students in order to expose them to research and the area of materials science.

### Binghamton University, The State University of New York (SUNY)

#### *Bridging Science and Engineering: Smart Energy Workshop Series*

During the next year, the MRS Binghamton Chapter will host a series of Smart Energy Workshops, which will serve as a platform for scientists to learn about how the materials they study are turned into the final devices, and for engineers to learn more about the materials used in the devices and systems they are constructing. The workshop, which is designed to give students a glimpse of how Smart Energy technologies are applied in industry, will include lecturers from industry who will interact with students and help them to learn more about the practical applications of the technologies they are researching. The Binghamton Chapter envisions the workshop becoming a multiday, annual event that will focus on a different aspect of Smart Energy each year.

### University of Kentucky

#### *Kentucky Materials Networking Day 2020*

The University of Kentucky (UKY) has designed a program to introduce and connect UKY students and faculty in STEM to neighboring universities and local communities through a daylong symposium. The event will consist of keynote speakers, student talks, a poster session and subsequent poster awards ceremony, coffee breaks for socializing, and a reception. The symposium will allow students to find researchers who are facing similar challenges in their field and possible collaborators or resources within the community to answer their questions. This event will also permit students in different fields to learn about each other’s research and present their work in front of a wide spectrum of scientists. In addition, the event will expose graduate and undergraduate students to a professional scientific conference and allow them to explore possible routes for



With a goal of providing opportunities for students to represent their new research and learn new academic poster design and presentation skills, the University of Houston hosted the MRS Special Project Grant funded “3rd University of Houston Student Symposium.” Forty-four posters were presented during the symposium, and prizes were awarded for the top graduate and undergraduate student posters.

their future research and careers. Local high-school teachers will also be invited to learn how to provide guidance to their students and introduce them to the possibility of pursuing STEM majors in college.

### University of Maryland *Multimodal Methods for In Situ Electron Microscopy Workshop*

The MRS Chapter at the University of Maryland will host the “Multimodal Methods for *In Situ* Electron Microscopy Workshop” at the National Institute of Standards and Technology. The program is designed to recognize the frontier research contributed by the next generation of investigators in the field of *in situ* electron microscopy (EM) and the future horizons focused on characterizing quantum materials/devices as well as to encourage young researchers’ participation, in honor of the multimodal environmental transmission electron microscope (ETEM). The planned workshop will consist of three parts:

1. Lectures given by invited lecturers who are experts in the field of *in situ* EM.
2. Poster presentations by early-career researchers from neighboring universities.
3. A formal government report and a peer-reviewed manuscript for publication in an EM journal regarding the future direction of *in situ* EM to capture quantum information.

### University of Minnesota *Working in the US as a Foreign National Workshop*

The MRS Chapter at the University of Minnesota will present a workshop for international PhD and graduate students in materials-related fields that aims to make seeking employment in industry and beyond a smoother process. This effort will provide information about searching for jobs as a foreign national and the subsequent work-visa application process. Local and remote alumni will share their experiences seeking jobs, undergoing the visa application process, and working in the United States.

### University of North Carolina at Chapel Hill *Middle-School Materials Science Days*

The MRS Chapter at the University of



(Top) Graduate students participated in a number of challenges during the “Materials Madness” competition, presented by 2019 MRS University Chapters Grant recipient, Boston University. Students are enjoying the ice cream that they made using liquid nitrogen.

(Bottom) 2019 Special Projects Grant awardee Oklahoma State University hosted the “OSU-Tulsa Python Coding & Materials Science Workshop.” The goal of this project was to introduce community college and high-school students to the latest coding tools and facilities at OSU-Tulsa.

North Carolina at Chapel Hill has received a grant to organize “Materials Science Days” at middle schools with underfunded science programs in North Carolina. Materials graduate students will set up interactive booths at middle schools, where students will have the opportunity to take part in hands-on experiments, work with tabletop scanning electron microscopes, and talk to graduate students about the fields of chemistry, physics, engineering, and materials science.

### The University of Tennessee, Knoxville *From Nerds to Common Words*

The MRS Chapter at The University of Tennessee, Knoxville, will organize a science communication workshop for undergraduate and graduate students in the College of Engineering that emphasizes how to transform technical jargon into common language in hopes that changing the rhetoric will boost the impact of one’s research by making it more accessible to the public.

In collaboration with The University of Tennessee, Knoxville’s School of Jour-

nalism and Electronic Media, professors and experts in the area of science communication and writing will give talks and guide breakout sessions. The day-long workshop will consist of three sessions:

1. A lecture series on the tips and tricks of developing and crafting a message.
2. Group breakout sessions geared at developing an elevator pitch.
3. A final assembly session that allows participants to deliver their pitches and receive audience feedback.

**The deadline for submitting Special Projects proposals is December 15 of each year.** Upon review of the proposals by the University Chapters and Special Projects Subcommittee, an announcement of selected projects will be made by the end of January the following year. A final report that recaps the project will be required, and the information will be posted to the Specials Projects Program web page. Proposals for Special Projects should be submitted electronically during the specified submission window online at [foundation.mrs.org](http://foundation.mrs.org). □