

Keramos Annual Report Fall 2019 - Spring 2020

Virginia Polytechnic Institute and State University



### **Chapter Advisor Executive Summary 2019-2020**

In its second year after its reformation, the Keramos chapter has been active in its outreach and fundraising. We inducted 9 undergraduate student members during the Fall 2019 induction ceremony. After only one year in standing, Keramos at Virginia Tech received its first award in the Ruby Award for work done during the inaugural year. This year's main focus has been geared towards campus outreach with planned projects such as Grilled Cheese-amos, and professional development with activities like hosting a representative from Corning to speak with the Keramos members. Finally, as most of our officers are graduating, new officers were voted into service.

The Fall 2019 semester was used to grow involvement in the group by holding a social meeting with food welcoming all inaugural members back to the program after the initial Fall 2018 to Spring 2019 year. During this semester, the new members of Keramos at Virginia Tech were inducted into the program. The Spring 2020 semester was busy with event planning. Officer meetings were held weekly to gather initial ideas and to create a functional plan of action. General body meetings happened once a month and were used to get general member input on the direction that the chapter was moving in. The chapter also held an interest meeting open to the public to inform prospective members about the organization. Regrettably, many of our events and plans were put on hold due to the Covid-19 global pandemic. This included the main outreach event for our year, which was planned using CGIF funds. While meetings still happened through online meeting software, the events were all postponed to the next year.

Our chapter is nonetheless excited about the progress made this year. With executed events in the areas of **professional development and social outreach**, and with further **fundraising projects** planned, we feel confident in our chapter's growth over this past year and the years to come. At the end of this global pandemic, Keramos at Virginia Tech stands poised and ready to continue its activeness in promoting ceramics in all facets and producing the next generation of ceramic professionals.

# Officers for the Upcoming Year

President Luke Bradshaw



Vice President Anna Card



Treasurer
Jacklyn Shen



Secretary
Thomas Canfield



Herald Timothy Reuwer



# **Current Members**

### **Spring 2019 Initiates**

Nathan McIlwaine	Sam Ashby	Matthew Drew	Matthew Rotondi
Harrison Jones	Allison Slominski	Alec Seastrom	Kevin Reuwer
Luke Bradshaw	Miranda Meisel	Nima Zakhireh	Patrick Miele
Ryan Godlewski	Juan Shiraishi	Kaitlyn Shirey	Kevin Gjata

# **New Members**

### Fall 2020 Initiates

Anna Card	Carl Nicholas	Emily Trotto	Kendall Lippert
Sara McBride	Sarah Propst	Thomas Canfield	Jacklyn Shen
Timothy Reuwer			

# **Graduating Members**

Name	Email	
Matthew Rotondi		
Nathan McIlwaine		
Sam Ashby		
Harrison Jones		
Patrick Miele		
Allison Slominski		
Alec Seastrom		

Nima Zakhireh	
Ryan Godlewski	
Carl Nicholas	

**Fall 2020 Initiation Ceremony** 



## **Chapter Activities**

#### **Grilled Cheese-amos**

Grilled Cheese-amos was a social event held on campus during the Fall 2019 semester. The chapter bought supplies to make grilled cheese and set up in a classroom. Current students were encouraged to stop by, grab a bite, play some games, and have a good time socializing with Keramos members. Pictured below are members of the chapter making the sandwiches and playing card games with prospective (now current) chapter members. This counted as one of the two mandatory events for the prospective members to attend, as a way for them to meet current members in a laid back atmosphere.





#### **Corning General Body Meeting**

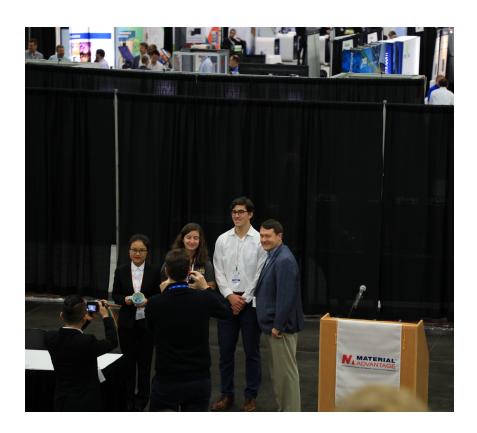
Corning is a world-renowned glass and ceramic material manufacturer and developer. Kevin Reuwer (Class of 2019), former VT MSE alumni who currently works at the Corning facility in Christiansburg, VA came in to briefly speak with students on his experience at the company and joining the workforce in general from VT's MSE department during the Fall 2019 semester. The meeting consisted of an interactive icebreaker for all of the students to get introduced to each other followed by the guest speaker. He covered his role at Corning, background on Corning globally, nationally, and specific to the Christiansburg facility, and talked about his time in the MSE department and discussed the transitions of that to the working world.



#### **MS&T Ceramic Competitions**

This past fall members from Keramos joined other Virginia Tech students at the annual Materials Science & Technology conference in Portland, Oregon. Members attended technical talks, networked with students and faculty from other schools, and most importantly competed in the design team competitions for ceramic disc and ceramic mug. Overall Virginia Tech had one team compete in the mug drop competition, three students throw in the disc golf competition, and one entry into the aesthetic disc competition. The mug drop team placed within the last five mugs that remained intact and one team from the ceramic disc competition won the aesthetic disc and disc golf events, along with another team coming in second place. These design competitions were a great way for students to get hands-on experience with ceramic composition, forming, firing, and finishing techniques. Using a variety of material from molded refractory clay to slip cast zirconia alumina composites.

With next year's MS&T conference being closer to home for us we plan to send even more teams to continue our streak of placements in these competitions and provide students with a source of information to pursue new and innovative techniques.





Highlight of VT winning the Ruby Award, with Brian Gilmore (the outgoing President of the National Chapter) as well as the leadership representatives of the Alfred University chapter. This was accepted at the National Convocation meeting, in which Nathan McIlwaine (outgoing president) represented Virginia Tech's Keramos chapter.

#### Elections for 2020-2021 Year

As most of the Fall 2019-Spring 2020 officers are graduating this spring, the chapter held officer elections this April. With the onset of the stay-at-home orders issued by governors all over the country, the chapter had to adapt to unfavorable circumstances and held a meeting on the online video-conferencing platform Zoom. All members joined the video conference and watched as each prospective officer gave a short speech about their qualifications for the various officer positions. The members utilized Zoom functions such as the poll function to vote for each member. After each new officer was chosen, the old and new officers for each respective role joined a breakout subcall to relay the responsibilities of the roles and to ask any questions.

#### **T-Shirts**

This year, Keramos T-Shirts were able to be designed, ordered, and delivered for our members, due to popular demand. Because of COVID-19, the T-Shirts were not able to be handed out this semester; however, our chapter is planning on sending shirts to graduating seniors who want them, and will be available to be picked up by returning members next semester.





### Colorado School of Mines Netflix Movie Night

Towards the end of April, the Colorado School of Mines chapter planned an online social event for all of the Keramos chapters nationwide to attend online. The event was a Netflix viewing party of the movie: "Spider-Man: Into the Spider-Verse." A few Keramos at Virginia Tech members were able to view the movie together online and interact with other members via the chat.

### Plans for the Future

For the coming year, we plan on finalizing the unfinished activities from this past year. Namely, we aim to complete the freshman Lee Hall outreach event to foster a growth of knowledge about materials science and ceramics with freshman engineering students. This activity should educate these freshman students on an exciting engineering field that many students do not traditionally come to college having.

Another unfinished activity is beginning our professional relationship with the local glassblower shop. Initial communication has begun to staff the shop with volunteer Keramos members. While the artisan will receive unpaid assistance, Keramos members will gain valuable skills in the glassblowing procedure, as well as the chance to work up to material costs to make their own projects free of charge. As Virginia Tech does not have a ceramics or glass-making facility to educate Virginia Tech students about the ins and outs of ceramic artistry, this opportunity would be invaluable in learning about ceramic and glass production.

Another project that had to be put on hold was the plaque making. Currently we have the molds made and the materials purchased to make the plaques. The first plaques just need to be made and the process validated before members can make their plaques. Unfortunately, Covid-19 has prevented students from using the labs. Next year should be when the plaques are finalized and ready to be made by all members of Keramos at Virginia Tech.

All other activities for next year are to be planned by the incoming officers. The incoming officers are energized by the prospect of growing Keramos at Virginia Tech. They have met with the current officer team to discuss the roles and have placed a big emphasis on financial growth of the chapter as well as increasing professional outreach. While none of their plans are finalized at the moment, the next officer team is confident that their vision for the chapter will not only maintain the work done over the past year and a half but elevate the chapter to a new level.

A more-detailed layout of future projects are given below:

#### Outreach

This year our chapter planned to host an outreach event with the purpose of getting freshmen students interested in ceramic engineering and materials engineering. Our university has all students complete a year of general engineering before choosing a specific engineering major. Our chapter hoped to spark interest in ceramics engineering in these general engineering students before they were required to choose a major. We partnered with Galipatia Engineering Learning Living Community to host this even in the engineering dorm to make this event extremely accessible. The event consisted of a 15 minute presentation given by one of our faculty about interesting uses of ceramic in industry, followed by 30 minute time to let the students glaze and decorate ceramic tiles, and ending with 30 minutes to let the student interact with the professors and keramos student members over pizza and beverages. We planned to fire the ceramic tiles and return them to the dorm so that the students would be able to pick up their personalized tile that they created. The original date for this event was supposed to be March 24th, but unfortunately we had to reschedule due to the COVID-19 outbreak. We are planning to reschedule this outreach event to a date in early October, hoping that we will be able to return to campus next semester. Luckily, it should be straightforward to put on the event since we have already bought the supplies, have a complete plan for the event, and have a good relationship with the learning living community in charge of the space we will be using.

#### **Plaques**

Our Keramos chapter plans to implement the making of plaques into the experience of every member. The goal is for every member of our Keramos chapter to cast, fire and glaze their own plaque of the Keramos sigil. We have supplies ready to make a mold that can be used for the organization, including a laser cut assortment of plastic pieces that can serve as an imprint for the mold.

#### **Superconductor Competition**

During the beginning of the spring semester, two members of our chapter sat down, researched and planned out a draft of a new type of competition for MS&T. This competition is imagined to be focused on building a superconductor in the lab, and then testing it next to other students to see who made the most powerful superconductor. This idea was brought up to the students of other chapters in the monthly national call, and work at Virginia Tech to further the development of this competition was put on hold due to the COVID-19 closures, and may commence once the laboratory spaces open up to undergraduates.