

Keramos Annual Report Fall 2020 - Spring 2021

Virginia Polytechnic Institute and State University



Chapter Advisor Executive Summary 2020-2021

In the third year after its reformation the chapter has encountered many roadblocks in terms of outreach and activities due to ongoing COVID restrictions. Despite getting the Ruby Award a second year in a row, after March of 2020 Virginia Tech went into lockdown. This lockdown has lasted from spring of last year and is still ongoing. We hope that this following fall 2021 things will open back up and allow us to do outreach and in- person activities again but that meant that the previous year all outreach and career talks were performed in a virtual fashion, leading to a serious decrease in attendance. Despite these restrictions we managed to offer two career talks; one being hosted by Dominion Energy (who reached out to us) and the other being hosted within Keramos featuring two alumni (Nathan McIlwaine and Harrison Jones) with Harrison offering insight into industry and the other into the academia route. Because of lack of outreach we were only able to induct two new members in this time period but did host elections to our existing members and new members to finalize officer positions for the following year.

Both semesters had the same restrictions, but involvement in activities and general responsiveness was significantly higher in the fall compared to the spring. This can likely be attributed to restriction/virtual fatigue, with less and less people being motivated to join in a virtual capacity as this form began to dominate their daily lives. On the other hand, this means that hopefully when things open back up in the fall people will be excited and motivated to attend in-person events leading to an increase in attendance. Due to the low responses and general restrictions we decided as a group to save the money we got from CGIF and to save it for the previously planned Living-Learning Community outreach event at Lee Hall (now Hoge Hall) as it had been described pre-lockdown. This will give us good exposure and help revitalize the somewhat starved population of our organization.

We are excited as an organization about the upcoming year and the progress we can make with STEM outreach and general interest from Virginia Tech students. We were able nonetheless to perform some **professional development** in the form of career talks with satisfactory attendance. As the pandemic restrictions are slowly lowered we stand poised as an organization to make great strides in membership and outreach capability and continue to garner interest and involvement by students in the field of ceramic engineering.

Officers for the Upcoming Year

President
Kendall Lippert

Vice President Clara Gambrel



Treasurer

Secretary

Herald

Current Members

Fall 2020 Initiates
None
Spring 2021 Initiates

Clara Gambrel	Brennan Rausch
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Graduating Members

Name	Email
Timothy Reuwer	$\times\!\!\times\!\!\times\!\!\times$
Thomas Canfield	
Sarah Propst	
Sara McBride	
Miranda Meisel	
Anna Card	
Jacklyn Shen	
Emily Trotto	
Luke Bradshaw	

Fall 2021 Initiation Ceremony Upcoming

Chapter Activities

Alumni Career Talk

This was the first career talk of the Fall Semester. It was hosted by Keramos and included alumni Nathan McIlwaine as well as Harrison Jones. One of these members went straight into industry after graduation while the other chose to pursue grad school. This talk was useful for students still undecided about the path they wished to take and offered different points of view about the two options students face after graduation. There was good attendance to this event and we plan on hosting other events discussing the same career choices in the future.

Dominion Energy Career Talk

This career talk was hosted by Dominion Energy. They contacted our organization and asked if we would like to have students attend. They talked about the company as a whole as well as different types of engineering positions within the company that students can apply to either after undergrad or graduate school. Their info session was not attended only by members of Keramos but also by other students from different majors within the college of engineering.

MS&T Ceramic Competitions

Due to Covid restrictions there was far less interest in the MS&T competitions in the fall. The motivation of many of the students to participate in these events is for the chance to get to attend such a conference and collaborate with other members. Having this motivation removed made it difficult to garner interest to participate in another virtual activity when many students are already feeling overwhelmed with virtual responsibilities. We are excited to have this conference in person next year and already have students who have expressed interest in participating in these events. We are very much looking forward to getting back into the lab and participating in the design competitions.

Elections for 2020-2021 Year

Our elections took place late in the spring 2021 semester. We wanted to ensure we could induct any interested members before performing the election to make sure there was as much involvement as possible, and to have a better chance at filling more of the officer positions. We were able to do our election directly following our spring induction of members and resulted in the president and vice president roles being filled. We have discussed the idea of performing a second round of elections at the beginning of the fall 2021 semester to fill the remaining roles.

Awards for 2020-2021

Our chapter was awarded with the Ruby Award for our actions in the previous year in both growth of our organization and activities. This was presented during the 2020 convocation awards ceremony and it has been a privilege to receive it two years in a row.

T-Shirts

With Covid restrictions in full swing, our organization was only able to slowly continue distribution of the T-Shirts. We still need to send shirts to members who graduated and were unable to pick them up. In addition, this will continue for newly graduating members who wish to receive their shirt.





Plans for the Future

In the upcoming year we have many plans for outreach and social activities. We still have the funding we received to complete the freshman living-learning community outreach event to foster interest in our organization and in ceramics and materials science. This is our major event that everyone in the organization is excited about. We look forward to being able to connect with new engineering students and get them excited about this field. We have gathered most of the material to perform this outreach event and are waiting to hear on the status of Virginia Tech opening in the fall before we make final accommodations.

All other activities for next year are to be determined and planned by the incoming officers. Priorities include garnering interest in the organization, performing STEM outreach in the local community using the CGIF kit we received the past year, as well as scheduling career talks with both people in academia and industry.

Our Keramos chapter has plans to implement the making of plaques into the experience of every member. The goal still stands for every member of our Keramos chapter to cast, fire and glaze their own plaque of the Keramos sigil. We ordered supplies the previous year to make a mold that can be used for the organization. These materials included clay as well as a laser cut assortment of plastic pieces that can serve as an imprint for the mold. The progress on this has been halted due to the lab space availability being restricted from COVID. We hope that when the lab spaces open up in the fall we can move forward with our work on this project.

During the beginning of the previous 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 was 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. Again progress of this has been unable to move forward in the 2020-2021 year as lab space and time is still heavily restricted with preference given to classes and senior design teams. We plan on reintroducing this idea the following year when potential progress on it could be made assuming it is deemed to be acceptable by the national board as a competition.