



THROUGH FIRE TO PERFECTION: The purpose of this Fraternity shall be to provide recognition, distinction and honor to those persons in ceramics whose scholarship and character qualify them for such recognition.

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Grand Master Potter's Message

Greetings Keramos members. It was a pleasure to step up into the role of President (aka Grand Master Potter) of Keramos this past fall. I have been serving on the Keramos Board of Directors since 2017 And am excited to continue to help lead and support our fraternity. Every year I have been astounded by the enthusiasm, creativity and dedication of the Keramos members and I look forward to seeing everything the Chapters accomplish this year.



To help you know me a bit better: I attended the University of Mary Washington for my undergraduate degree in physics. I then went to the University of Virginia where I got a masters in Engineering Physics and a PhD in Materials Science. While at UVA, I worked with Elizabeth Opila on Ultra High Temperature Ceramic Oxidation and fell in love with ceramics. After graduating I moved to Dayton, Ohio to work at the Air Force Research Laboratory (WPAFB), first for UES, Inc, then MacB, and now Battelle Memorial Institute. While my current role is far removed from ceramics, I still consider myself a ceramicist in my soul.

As the incoming president, my aim is to continue fulfilling the vision of our previous presidents. This includes continuing to extend the reach of Keramos. We have been working to revive old chapters and found new ones at schools with strong ceramic interests. I would also like to continue improving our financial standing. The fraternity is well positioned financially, but it is important we continue our fundraising, so that we can support the students in their endeavors. An easy way you can help Keramos financially is to pay your annual dues! You can financially contribute to Keramos via the information at the bottom of this newsletter. Keramos funds are used entirely to assist the students in attending our annual Convocation and the Materials Science and Technology Conference and Exhibition.

The last few years have been difficult for our students, our chapters, and all of us, especially given the restrictions on meetings and the difficulty in doing outreach without being able to go physically be in their respective communities. Regardless, the Chapters have continued to find ways to share their love of ceramics with each other and their communities. Check out what some of the Chapters have to say below!

Please reach out to any of the board members and/or students if you have any questions or comments.

Thank you for your continued support of Keramos!
Fraternally yours,
Dr. Kathleen Cissel, Keramos President

Past President's Farewell

It seems like the entire world has been *through fire* these last couple of years; it remains to be seen if that experience will lead us *to perfection*. Throughout the challenges of remote meetings, minimal travel, and limited opportunities to engage with their fellow students and surrounding communities, the Keramos chapters have endured. As you've read elsewhere in this issue of the Keragram, the activities of the chapters continue to inspire, the Mug Drop and Disk Golf competitions continue to showcase the talents of ceramics students worldwide, and the Keramos fraternity continues into its 120th year.*

You may have noticed that Kevin Fox has rejoined the board in his long-held Herald role; in true phoenix fashion, his return represents both a connection to the past and increased hope for the future. As long as we have dedicated volunteers and engaged students, this fraternity will continue to serve the ceramics community.

Keramos is a fraternity of, by, and for the students; the board exists primarily for continuity and to help coordinate engagement of alumni. In a very similar fashion, the faculty advisors of each chapter are crucial for maintaining continuity and institutional knowledge at the local level. Please reach out to the current advisor of your chapter and thank them for being involved. If you are a chapter advisor, thank you for serving, and please don't be a stranger! We'd love to get more interaction with and among all of the chapter advisors.

I was privileged to serve as Grand Master Potter for the past two years, and I have now happily handed over the reins to Kathleen and the rest of the Keramos board. The first rule of any fraternity is to replace yourself with someone better, and I step aside with full confidence in having accomplished this. I look forward to seeing where their leadership takes us!

Fraternally yours,
Prof. Geoff Brennecka, Keramos Past President
Colorado School of Mines, geoff.brennecka@mines.edu

*Beta Pi Kappa was founded in 1902 but dormant in 1906, so 2022 is the 120th year of the fraternity now known as Keramos



Treasurer

Hello Keramos! My name is Kelley Wilkerson and I am one of the newest members of the Keramos

Executive board taking on the role of treasurer. Since I am new to the board, I thought I would introduce myself to all of you. I grew up in St. Louis, MO and attended University of Missouri-Rolla where I obtained my bachelor's degree in Ceramic Engineering in 2007. I ended up staying in Rolla and attending what became newly named Missouri University of Science and Technology for my Ph.D. studies. I was Jeff Smith's advisee and I studied thermal properties of spinel solid solutions. I finally graduated in 2012. My husband, Josh (Computer Scientist), and I were fortunate to graduate with our Ph.D.s at the same time and obtain employment with the Department of Defense NAVAIR-NAWCWD where I did a lot of really cool stuff, but none of it was materials! We spent a year out in sunny California, after which I landed a job with Allied Mineral Products, Inc (AMP) in Columbus, OH, which was a much better fit. I was at AMP for 5 years where I began as a Senior Research and Development Engineer in Industrial Products, and then became the Manager of the Light Metals R&D team.



As much fun as we had in Columbus (we still miss it!) we couldn't stay away from Missouri, and the chance to become a teaching professor at Missouri S&T. Once again, the family moved for my career! I have been working as an

assistant teaching professor in the Ceramic Engineering Department since 2018. I concentrate on ceramic education, outreach, and service for the materials science and engineering department. I oversee the extensive laboratory sequence at S&T as well as our Senior Design Capstone Course. I have the pleasure of advising one of our newest student groups, Ceramic Artists of S&T (CAST), as well as Material Advantage. In addition to my regular day job, I have always enjoyed volunteering for the American Ceramic Society. I have served on several committees, and I am currently the Vice President of the Refractory Ceramics Division, a member of the Bulletin EAB, and one of the co-organizers for UNITECR.

Outside of work, I have many hobbies including camping, hiking, and playing games with Josh and our two daughters Dylan and Reese. I am a fitness enthusiast, with my favorite fitness activities being biking, running, and kickboxing. We just welcomed a second dog into our family in January, so a lot of time is being dedicated to the newest member of the family, Rocky, and making sure his brother Max doesn't get too jealous!

Fraternally yours,
Kelley Wilkerson, Keramos Treasurer
Missouri S&T, kelley.wilkerson@mst.edu

Recording Secretary

Kelsey Canon serves as the new Keramos secretary. She holds a B.S. in Metallurgical and Materials Engineering from the CO School of Mines and is working on a M.S. in Computer Science with a concentration in Data Science. She is excited to help the student chapters become the best they can be, in conjunction with normal work at Lockheed Martin in Littleton, CO. Outside of work and school, Kelsey enjoys cooking, hiking, camping, running, climbing, reading, and spending time with friends and family.



Keramos Convocation and Activities at MS&T 2021, Cleveland, Ohio

Keramos activities at MS&T 2022 began with a web board meeting to prepare for Convocation, discussed general fraternity business, and welcomed Kelsey and Kelley as our new Recording Secretary and Treasurer receptively.

The morning continued with the annual Keramos Chapter Convocation, during which the chapter representatives discussed their activities and accomplishments for the year. Colorado won for the best chapter for 2021, while the Illinois took home Most Improved Chapter award. The assembled representatives also discussed rule changes and clarifications for the competitions and for the chapters. Notably, the chapters voted to reword the requirements for chapter membership to avoid excluding first- and second-year students. Convocation and the presentation of 2021 Greaves-Walker Roll of Honor award to Dr. David Payne, University of Illinois at Urbana-Champaign and a presentation on her research work from Career Speaker Ashley Hilmas from Air Force Research in Ohio.



The highlight of every MS&T is the certainly the student competitions on Tuesday. We had virtual and onsite event this year. Each of the Ceramic Mug Drop Contest and the Disc Golf Competition around half a dozen. The Most Aesthetic Mug this year was a gorgeous, glazed mug from Elliot Sutalski (Missouri S&T). After multiple rounds of the submitted mugs, in then end though, only Sophie Grier mug from Missouri S&T survived the final drop.

The Ceramic Disc Golf Competition award went to Camden Holloway from Virginia Tech.

On the virtual side the aesthetic mug went to Claire Pallet from Missouri S&T and the aesthetic disc went to Jacob Stacey also from Missouri S&T.

Thank you to all those who submitted items and attended the event this year. We look forward to 2022 where everyone that wants to can attend and see the mug and disc competitions in person!



Chapter Notes

Upcoming dates of note:

- The board is accepting Honorary Keramos Members.
- Chapter Reports Due: April 1, 2022, but will except up to May 1st, 2022
- MS&T Oct 8-13, 2022 in Pittsburg, PA

Colorado Article

The Colorado School of Mines Keramos chapter experienced a year unlike any other. While we were unable to hold any of our in-person events, there were still opportunities to pursue professional development, outreach, and social events.

The chapter's memorable moments exist mostly within the outreach events that we participated in, the CSM Glass Shop's continued success, and in camaraderie earned. The chapter participated in Celebration of Mines, the Adams County Career Expo and a multi-school panel for high school students. In these events members spread the word about ceramic engineering and Keramos. The glass shop saw a transition in leadership as well as continued success in running its class, Soda Lime Saturday events, and amazingly successful fundraising sales. More updates and pictures can be found under @HappyLittleGlassShop on Instagram. Keramos members are majorly supportive of the shop as teaching assistants and volunteers. Our wonderful shop managers also serve on the chapter's executive board.

There were some plans that remained on hold due to COVID-19 restrictions; two years ago, this chapter began planning a materials science demonstration day for K-12 educators. This was possible due to a generous grant from CGIF. The funds remain earmarked for that event and as restrictions begin to lift, hopefully it can take place within the 2021-2022 academic year.

This year our chapter persevered through a changed academic and social experience. Our members showed commitment to each other, academic achievement, and Keramos. Next year, we look forward to an enthusiastic new president and a year full of opportunity.

Samantha Baumann

President 2020-2021

Missouri S&T Keramos Newsletter

Upcoming:

- April 16: Spring Initiation
- April 22: Spring Banquet

Virtual Etiquette Dinner

Despite not being allowed to meet in person for the usual etiquette dinner, Keramos was able to put on a virtual etiquette dinner over Zoom for the department. Dr. Huebner agreed to present proper etiquette to the students. Despite missing the dinner portion, students were still able to hear some interesting stories and see the dos and do-nots for a professional dinner. The department had a good time learning from Dr. Huebner and answering materials trivia questions for prizes.



CGIF Outreach

This year for the CGIF outreach event, Keramos organized demo boxes to send to high school students. Keramos prepared some simple, do-it-yourself demos to expose high schoolers to material science. A total of 210 demo boxes were built and shipped out for students! These boxes have been well received and multiple high school teachers have ask for demonstrations for their students. Thank you to our CGIF Chair for planning a successful outreach event!



Student Speaker Series

Keramos organized a student speaker series during seminar for undergraduate students to speak on their co-op and undergraduate research opportunities. Four senior students agreed to present on their experiences. These students presented on their work as well as the benefits of taking these opportunities. This was a great experience for younger students to learn about opportunities inside and outside the department.



Help out the Next Generation of Ceramic Engineers

The Board of Directors uses fraternity funds to send students to the annual Keramos Convocation at the Materials Science and Technology Conference each fall. We need your help in maintaining our ability to help students become new leaders in the ceramic engineering profession. We've established a PayPal account via the Keramos web page to make it easy to pay your \$10 annual membership dues, and additional donations are greatly appreciated. You may also continue to pay dues by mail to the General Secretary, using the form at the end of the Keragram. Thank you for your continued support of Keramos!

Stay Connected with Keramos

Keramos is working to improve its online presence for better communication with students and alumni members. Check out the Keramos web page, hosted by the American Ceramic Society:



<http://ceramics.org/classes/keramos>

We have updated the page with annual reports from each of our chapters, so that you can keep up with their impressive efforts in professional development and outreach.

Keramos has also established a group on LinkedIn to better communicate with our alumni members. It's available here:



<https://www.linkedin.com/groups/3573516>

We're using this group to hold a discussion about the value of Keramos to our members, and we would very much like to have your input.

Alumni Support

Our alumni play a crucial role in enabling the fraternity to continue to advance and promote professional development for the students. We are very grateful for your continued support – it is making a significant impact for the future.

Annual Dues

Annual Dues are \$10. Make check payable to “Keramos Fraternity”. If you have not paid your dues this year through ACerS or via PayPal (see link at (<http://ceramics.org/classes/keramos>), please fill in this coupon and mail to the General Secretary.

Jeffrey D. Smith
Keramos National Fraternity
222 McNutt Hall
1400 N. Bishop
Rolla, MO 65409

Keramos Dues and Comments:

Name: _____

Address: _____

City, State & Zip: _____

Email: _____

Annual Dues (\$10) _____ Donation: _____

Message: _____