



*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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### President's Message

Greetings Keramos members. I'm excited to continue my term as President (or Grand Master Potter) of Keramos and the board has been very busy over the past year. I'm consistently impressed by the enthusiasm, professionalism, and spirit of service that I see exhibited by each Keramos Chapter.

I'm looking forward to another strong year for Keramos. As you read this Keragram, you may notice that we have a new vice president, Dr. Geoff Brennecka. Please join me in welcoming Geoff and his wealth of experience to the board. I am confident we will accomplish much with this Board. I also want to thank Dr. Erica Corral for her years of service and wish her luck as she pursues other interests in the future.

When I began this term as President a year ago, I worked with the Board to set the vision of Keramos for the next few years. I want to share this vision again with you as we will be calling on our membership to help support it. Our vision is three-fold:

1. **Extend the reach of Keramos.** We have inducted a new chapter last year, Colorado School of Mines. We look to induct 1-2 chapters in the next 1-2 years including an international chapter. We do have some interest by a couple of universities already!
2. **Strengthen our relationship with the ceramics/materials community.** We are actively pursuing closer partnerships with the American Ceramic Society, the Ceramic and Glass Industry Foundation, and other materials-related student groups. See below regarding a new partnership!
3. **Improve our financial standing.** We will be pursuing a fundraising campaign through our membership and partnering with corporate sponsors. We need volunteers! See below.

I would like to highlight a very important partnership with the Ceramic and Glass Industry Foundation (CGIF). The Ceramic and Glass Industry Foundation (CGIF) and Keramos Fraternity have entered into a formal memorandum of understanding (MOU) with the aim of working together toward the common goal of promoting interest in ceramic and glass engineering, technology, and science. In particular, this MOU is intended to increase projects and activities that introduce young people to ceramic and glass science by increasing the financial support of Keramos student chapters and thereby enhancing the effectiveness of both organizations.

Keramos and The American Ceramic Society have had a close relationship for many years. Numerous leading ceramic and glass professionals are members of both ACerS and Keramos, including many ACerS and Keramos board members.



The CGIF has provided funding to several universities with active Keramos chapters, and Keramos student chapters regularly perform outreach activities that introduce their peers and younger students to ceramic and glass science. Under this MOU and the direction of the Keramos National Board of Directors, Keramos chapters across the nation will have the opportunity to write proposals to the CGIF. CGIF will earmark at least \$1,500 of annual grant funding for each Keramos chapter to support outreach activities to their peers on campus and to younger students in the community. The CGIF will also make a Materials Science Classroom Kit available to each Keramos chapter that submits a proposal to use it in their outreach efforts. For more details on this relationship between Keramos and the CGIF, please see the press release by clicking [here](#) or enter the following in your web browser:

<http://foundation.ceramics.org/cgif-news/cgif-and-keramos-partner-for-student-outreach>

Early in 2018, the Keramos Board of Directors will be calling upon the Keramos membership for volunteers in our fundraising committee. This committee will be managing the CGIF relationship and starting a general Keramos fundraising campaign. Please contact me if you are interested in serving in this committee and please continue to send your dues and donations to help us in our vision! They are much appreciated by our student members who we are able to fund to attend our annual convocation along with the Materials Science and Technology Conference and Exhibition. We'll continue to use the Keragram to keep you informed of all their accomplishments.

Thank you for your continued support of Keramos.

Dr. Brian Gilmore, President; [Brian.Gilmore@pxd.com](mailto:Brian.Gilmore@pxd.com)

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### Vice President's Message

Dear fellow Keramos members, I am honored to join the Keramos executive committee as a replacement for Erica Corral, who recently stepped down. At the 2017 Keramos Convocation in Pittsburgh, PA, the student chapters voted to install me as Vice President, directly filling Erica's spot. While this is my first foray into the national Keramos leadership, I have been active at the national level in ACerS for many years. I recently rotated off the ACerS Board of Directors, am the immediate Past Chair of the Electronics Division, recently began serving as an Editor of the Journal of the American Ceramic Society, and have been a long-time mentor of the President's Council of Student Advisors (PCSA). Perhaps more importantly, I have been directly involved with Keramos activities via the newly-formed Education and Professional Development Class (EPDC) of ACerS and its immediate predecessor, the Education Integration Committee. I am currently an Assistant Professor at the Colorado School of Mines where I proudly serve as faculty advisor for the newest Keramos chapter.



To give a bit more background on me, I earned my B.S. and M.S. from the University of Missouri-Rolla (now Missouri S&T), both in Ceramic Engineering under Prof. Wayne Huebner. From there, I moved to the University of Illinois at Urbana-Champaign, where I got my PhD in Materials Science and Engineering under Prof. David Payne. I did a post-doc at Sandia National Laboratories in Albuquerque, NM, before being promoted to technical staff in the same group. I spent 8 years enjoying New Mexico green chile before moving north to Colorado.

I'm excited to join the Keramos exec board at such a dynamic time in the fraternity's history. We've partnered with the CGIF, we're adding chapters, and we're looking to make the second century of Keramos even better than the first!

Dr. Geoff Brenneka, President; [gbrennec@mines.edu](mailto:gbrennec@mines.edu)

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## Herald's Message

Hello Keramos members. My name is Kevin Fox, and I'm serving as Herald and immediate Past President of the Board of Directors. In my role as Herald, I will continue working to update our membership database to make sure that we can keep our student members in touch with alumni. The chapters will be reaching out to their members to ask for updated contact information to assist with this process. You can help us by renewing your Keramos dues via [PayPal](#). It takes about 60 seconds, and you can make sure we have your latest information via the payment process. As always, all of the money that you provide to Keramos via annual dues and donations is used to fund professional development opportunities for students in ceramic and glass engineering.



I've also been tasked with helping to grow the number of Keramos chapters. We've had recent successes in chartering new groups at the University of Connecticut and Colorado School of Mines. We will continue this trend, particularly with the strength of our recent partnership with the [Ceramic and Glass Industry Foundation](#).

Thank you for your continued support of Keramos.

Dr. Kevin M. Fox, Herald; [kevin.fox@srml.doe.gov](mailto:kevin.fox@srml.doe.gov)

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## Keramos at MS&T 2017, Pittsburgh, PA

Keramos activities at MS&T 2017 began with a breakfast meeting of the Board of Directors at the Omni hotel where we welcomed our new Vice President, Geoff Brennecka, Professor at the Colorado School of Mines. Geoff is picking up the role recently vacated by Erica Corral; while this is his first role on the Keramos Board of Directors, Geoff has been heavily involved in Keramos and ACerS activities for many years. As part of this appointment, the Board voted unanimously to recommend extending current board assignments for an additional two (2) years in order to help with this transition, strengthen board cohesiveness, and lay the ground work for a stronger Keramos in the coming years. The meeting also included discussions of the new collaboration with GCIF to enhance the ability of Keramos chapters to connect with their communities, and the decision was made to form a financial committee which will be tasked with fundraising as well as overseeing the Keramos chapter-tied CGIF funds.

The morning continued with the annual Keramos Chapter Convocation, during which the chapter representatives discussed their year's activities and accomplishments. The Missouri Chapter (Missouri MS&T) regained the title of "Best Chapter" for 2017, while the newly-formed Colorado chapter (Colorado School of Mines) took home Most Improved Chapter award. The assembled representatives also approved the actions recommended by the Board, including extending the current board roles, creation of a finance committee, and the new MOU with the GCIF. During the convocation, we also heard life lessons and chapter history from one of the inventors of gorilla glass, Keramos' own Dr. Matt Dejneka of Corning, Inc, the recipient of the 2017 Greaves-Walker Roll of Honor award. The discussion stirred many memories of comradery which resonated through the current chapters. Convocation wrapped up with a presentation from Career Speaker Dr. Daniel Mumm from UC Irvine. Dr. Mumm wove together technical information on high temperature ceramics with life advice about decisions that each of the chapter delegates will have to make in their personal life and careers.

## Images from 2017 Convocation



Later than night, the 2017 Keramos “after hours” reception was a success. Students from at least 10 different universities attended with a strong turnout from our new Colorado chapter. The reception was casual but full of networking between students, industry and academia. Discussions ranged from current research collaborations to past and present Keramos effects on society. Current president, Brian Gilmore, discussed the chapter’s rich heritage and discussed the chapter’s bright future. Overall a great night was had by all.



Tuesday marked the Keramos student competitions at MS&T that were a great success again this year. The Ceramic Mug Drop Contest had 23 entries and the Disc Golf Competition had 13. The Most Aesthetic Mug came from Rebecca Whitesell from Iowa State University. There was a tie for the Mug Drop itself between Justin Yon from Virginia Tech and Amanda Agui from University of Connecticut. Both mugs survived until a drop from 210cm! In the Disc Golf competition, the most aesthetic disc was created by Missouri Science & Technology student, Stephanie Soendiker. There was a second tie for the longest throw of the Disc Golf. This time between Justin Yon and Daniel Drury, of Virginia Tech and Missouri Science & Technology, respectively.

Images from 2017 Student Competitions



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## Missouri University of Science and Technology Chapter

This fall semester has been a busy one for the Missouri S&T chapter! We took home some awards from the MS&T17 conference in Pittsburgh, held our semesterly etiquette dinner and a couple lunch and learns, and even created a new Halloween event called Skeramos. Here's a closer look at what we've been up to:

Our chapter had a blast at MS&T 2017 as always, and we received some excellent news at Convocation. Our chapter was awarded the Diamond chapter award, as well as the award for Chapter of the Year. The chapter delegates also elected a new student rep, Drew Jacobs, who is from the S&T chapter and excited to serve the national organization. Later during the conference, the Student Speaking competition was held, where Ben Lawrence was awarded 2nd runner up for his presentation on Yin-Min Blue. Finally, we went for gold and won with the aesthetic disc competition, won by Stephanie Soendeker, and the durable disc competition, won by Danny Drury.



On the home front, we held a couple of lunch and learns, where students present their co-op experiences from different companies and educate their classmates on their day-to-day work and life. We also hosted our annual Kohler sponsored Etiquette Dinner, where we went to Just-A-Taste in St. James MO to learn proper dining etiquette from Dr. Mary Reidmeyer, all while enjoying spectacular food. Lastly, we hosted a new event this semester called Skeramos, where we went to a haunted maze in Rolla and binge-watched some episodes from the new season of Stranger Things on Netflix.

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## University of Arizona Chapter

The University of Arizona Chapter of Keramos has been through a rebirth this past semester. Since many of the former officers graduated in the year prior, there was much confusion from the new officers on how the society should be run. Despite the inexperience, the officers were able to start the process to rebuild Keramos.

The chapter hosts bi-weekly meetings where discussion occurs about outreach, recruitment, future plans, and Keramos business. Usually 10-15 students are in attendance at the meetings which doesn't sound like much, but compared to the last year when only a few attended, it is a step in the right direction.

Some big events for this semester have included attending MS&T 2017 in Pittsburgh, where four students attended and were able to see and participate in a National meeting as well as being able to network with other officers from different Universities.





Keramos hosted a BBQ at the off-campus research facility, the Arizona Material Laboratory, which was attended by over 30 professors, students and staff, and participated in the MSE Homecoming, where many members had opportunities to interact with MSE alumni. The students were also able to compete against the professors in a friendly tournament of Bocce ball, which helped the student-professor bonds grow.

Keramos is also planning to host a Thanksgiving potluck the day before Thanksgiving break begins, so the department has a chance eat, laugh, and have fun with the students before we spend time with our families.

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### Colorado School of Mines Chapter

The Colorado School of Mines chapter of Keramos has been busy during our inaugural year trying to figure out our role on campus and how we can best serve our materials science community on campus and in Colorado. Five chapter members were able to attend the annual Convocation during the MS&T conference in Pittsburgh this year, which we were quite pleased with for our first attendance at the meeting, ever. We initiated seven new members this Fall semester (one of which is a metallurgy professor who is slowly turning away from the dark side), which brings us to an exciting total of 18 active members!



One of our chapter's biggest tasks so far has been setting up the new hot glass shop on campus. Keramos oversees its trained users, stock of various supplies, and manages the demos that are run in the shop. We have also worked on setting up an interactive demo which we have modeled after CSM's "Free Pour Friday" metal casting event. For these events, we bring in untrained users and walk them through the process of making their very own paperweight (trained users interact with the furnaces, and the guests get to pick the colors and do all of the shaping on their own). While we have currently extended this to opportunity to Keramos members and to the members of CSM's Materials Advantage chapter, we hope that this will become a regular event open to the campus in the upcoming semester. We have decided to call this event "Soda Lime Sundays" to reflect our use of soda lime silicate glass (and that it happens on Sundays).



We are excited about the other events that we have had and are yet to come. We hope to make "Skeramos" a tradition where we go to haunted houses or watch scary movies – what's a better way to bring people together than to scare them? We plan to make other events regular, such as resume workshops, practice interviews, and etiquette dinners (with fast food until we find a sponsor!). We are working on getting our plaque-making and pledging processes down and look forward to our chapter growing in the coming years. We appreciate all of the support from the national chapter and other individual chapters in getting our very own chapter up and running!

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## Keramos Needs Your Help

The Keramos treasury is running dangerously low. The Board of Directors uses fraternity funds to send students to the annual Keramos Convocation at the Materials Science and Technology Conference each October. 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!

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## 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.

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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.

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## Alumni Support

Our alumni play a crucial role in sustaining and 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. Thank you to those who sent in their dues and special thanks to the alumni listed below who have contributed beyond their annual dues:

**Steven Ashlock**

**Joseph Bailey**

**Geoff Brennecka**

**Kelley Busch**

**Matt Dejneka**

**Edward Duderstadt**

**Bill Fahrenholtz**

**Kevin Fox**

**M. Dean Houston**

**Barrett Potter**

**Dennis W. Readey**

**Frances D. Rensvold**

**William Rhodes**

**Laura Schell**

**Jeff Smith**

**Gary Strumbaugh**

**Robert Verneti**

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## 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  
General Secretary  
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: \_\_\_\_\_