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## **Table of Contents**

<b>I.</b>	<b>Chapter Advisor Executive Summary</b>	<b>2</b>
<b>II.</b>	<b>Annual Plan for Upcoming Year</b>	<b>3</b>
<b>III.</b>	<b>List of Officers for Upcoming Year</b>	<b>5</b>
<b>IV.</b>	<b>List of Active Members</b>	<b>6</b>
<b>V.</b>	<b>Honorary Member Nomination</b>	<b>9</b>
<b>VI.</b>	<b>Treasurer's Report</b>	<b>11</b>
<b>VII.</b>	<b>Chapter Activities</b>	
	a. Fundraising	12
	b. Educational Outreach	12
	c. Professional Development	14
	d. Service to the Ceramics Community	19
	e. Alumni Engagement	21
	f. Biennial Convocation and Annual Meeting	22
	g. Inter-chapter Communications	22
<b>VIII.</b>	<b>Summary Article</b>	<b>23</b>

## I. Chapter Advisor Executive Summary

This past has been a very productive, and transformational, year for the Missouri Chapter of Keramos. The Chapter executive officers set some aggressive goals a year ago and the year began with them working hard to complete the various tasks, as has been the case every year that I have been Keramos advisor. Midway through the fall semester things changed. Two themes emerged, “professional development” championed by President, Jeff Josken, and “Chapter enthusiasm” championed by the Herald, Steven Ashlock. The two themes meshed well together as the Chapter officers realized that providing additional professional development activities would require more engagement by the Keramos members. New committees were formed, a few scheduled events were delayed and new activities were established. Details on these changes are included in the Chapter report.

As adviser there are a few changes that I will highlight here. One of the new committees formed was the networking committee. In the past, such a committee might have been referred to as “social” as the main activities have been more social in nature. However, the Keramos officers have used the fun events to engage members, introduce students to Keramos and mainly to ramp up enthusiasm. The immediate result of these activities was more students at Keramos general meetings and activities and ultimately many more students interested in Keramos officer elections. This is the first year in recent memory where every officer position had at least two candidates and many had four. Additionally, a few of the candidates were sophomores, and perhaps for the first time in this chapter, a sophomore was elected Keramos Vice President.

On the professional development side, it was difficult to select a particular activity to highlight but one new activity that has been well received is the Keramos sponsored luncheons. Probably the best thing about it is the inherent flexibility of the event. Each month the officers decide on a theme for the next luncheon so they can quickly tailor topics to needs: “How has Keramos helped you?”, “What is hot in your research area?”, “How do I do well in interviews?”, etc. Of course at some point, Keramos will begin to exhaust local topics and expertise and there are already plans in the works to have selected individuals “Skype in” to the luncheons.

An unfortunate issue did arise this year as the Chapter’s honorary Keramos candidate was rejected. Jill Glass was elected to Keramos as an undergraduate and, of course, was ineligible to be honored. This issue caused the current officers to review their internal process to determine where the problem occurred so that it could be prevented in the future. A step in the process was changed from asking if the candidate was ever a Keramos member to asking the national board if the candidate was a member, a simple fix to prevent this issue in the future.

It is obvious that the past year has been transformational for the Missouri chapter; a group of dedicated executive officers from an already great Keramos Chapter took a hard look at itself and made changes in hopes to become an even better Keramos Chapter. I am certain they succeeded.

## II. Annual Plan for Upcoming Year

The main goal for the next year is to continue the growth of Keramos and membership meaningful to all students. The chapter organizes several events focused on professionalism, including the etiquette dinner, practice interviews and monthly luncheons. The lessons learned at our professional events will help members become better leaders here on campus and will ultimately help them be better leaders when they get out into the workplace.

The major concern for our chapter engaging students. There are only a few executive positions, so keeping the others involved is important but can be tricky. We will try to combat this by creating several committees in which the students can join and participate. Next year we look to expand the influence of the networking committee and the fundraising committee that were created this year. This allows more students to be involved in decision making. Also, this brings more ideas to the table that may have been overlooked by the executive board. Additionally, students are interested in numerous things so letting more students have input should help improve attendance at chapter events. Also, the increased number of events will help with recruitment, ultimately strengthening the chapter. We have seen great results from new committees and are looking forward to what they will accomplish with an expanded role in the organization.

In order to properly communicate events for the upcoming year, our chapter will be utilizing new software provided by the university called OrgSync. OrgSync has a number of tools that will fix some of the problems faced in previous years. Member management will be much easier with built in roster tools to help keep list serves up to date. There is also a wall, similar to social media sites that will allow members to communicate with on another much easier and give feedback on events much more quickly. The Keramos public website can also be built off OrgSync, allowing the chapter to update the website much more easily.

In the past year we increased the number of events focused on professionalism. These include: students discussing their own personal professional development through summer employment opportunities, bringing in distinguished members of the ceramics industry to give talks at seminar, monthly luncheons focusing on topics such as summer employment opportunities or how Keramos helped them after graduation, and practice interviews for students. We plan on continuing and expanding all of these events. These events have helped us impact more students while improving member professionalism.

Next year will be the first time offering Kid's Kamp, which will hopefully become an annual Keramos event. Kid's Camp will be held at Missouri S&T and we will open our labs to young students to learn more about ceramics and the ceramic engineering profession. They will glaze clay ornaments and take them home with them. Last year, we began preparing for Kid's Camp by making the clay ornaments; this year, we acquired the glaze that we will use with the ornaments. We will be offering Kid's Camp to Big Brothers Big Sisters and other similar groups, to try and draw in kids who would really benefit from the experience.

Lastly, we plan on continuing with our ongoing project of compiling the history of our chapter. All of the historical documents have been put into electronic format but still need to be organized. There is a very large gap in our chapter's history that we are

working to fill and we will try to complete the update early next year. Assigning the new historian to tackle this task is a bit overwhelming so breaking it up into sections should help with productivity. We are looking forward to a very productive year for the Missouri chapter of Keramos.

### III. List of Officers for Upcoming Year

Name: Steven Ashlock

Office: President

Address: [REDACTED]

Phone Number: [REDACTED]

E-mail Address: [REDACTED]

Name: Myranda Ferris

Office: Vice President

Address: [REDACTED]

Phone Number: [REDACTED]

E-mail Address: [REDACTED]

Name: Derek Guenther

Office: Secretary

Address: [REDACTED]

Phone Number: [REDACTED]

E-mail Address: [REDACTED]

Name: Caroline Murphy

Office: Treasurer

Address: [REDACTED]

Phone Number: [REDACTED]

E-mail Address: [REDACTED]

Name: John Tomaszewski

Office: Herald

Address: [REDACTED]

Phone Number: [REDACTED]

E-mail Address: [REDACTED]

Advisor: Dr. Jeff Smith

Address: Materials Science and Engineering Department

B53 McNutt Hall

Missouri University of Science and Technology

Rolla, MO 65409

Phone Number: [REDACTED]

E-mail Address: [REDACTED]

Committee Chairs:

History: Austin Gerlt

Nominations: Nicholas Santoro

#### IV. List of Active Members:

##### **Undergraduate Members**

Ashlock, Steven  
Arledge, Taylor<sup>1</sup>  
Brune, Paul Michael  
Coley, Cassandra<sup>1,3</sup>  
Ferris, Myranda<sup>1</sup>  
Gerlt, Austin Robert Cole  
Gilbert, Megan Elise<sup>3</sup>  
Gordon, Joseph Thomas<sup>3</sup>  
Guenther, Derek<sup>1</sup>  
Jones, Ryan P<sup>3</sup>  
Josken, Jeffrey Robert<sup>3</sup>  
Krev, Kathryn E  
Li, Jialun<sup>1</sup>  
Loyet, Shannon<sup>1</sup>  
McGuire, Aaron<sup>1</sup>  
Meier, William Richard<sup>3</sup>  
Mullen, Rebecca Louise<sup>3</sup>  
Murphy, Caroline<sup>1</sup>  
Nolte, Elizabeth<sup>1</sup>  
Padgett, Sean  
Powell, Amber Sierra  
Reidmeyer, Elizabeth Rose  
Ryan, Colin Michael<sup>3</sup>  
Santoro, Nicholas Adam  
Scharr, Kayla Lynn<sup>3</sup>  
Schroeder, William  
Schlup, Andrew<sup>1</sup>  
Snow, Britni Michelle  
Tomaszewski, John  
Verity, Susan Elizabeth  
Wilkerson, Ryan Patrick<sup>3</sup>  
Wittmaier, Connor<sup>1</sup>

Fall 2012 Initiates<sup>1</sup>

Winter 2012 Graduates<sup>2</sup>

Spring 2013 Graduates<sup>3</sup>

##### **Graduate Members**

George, Jaime  
Goetschius, Kathryn  
Lai, Benjamin<sup>3</sup>  
Neuman, Eric  
Sarikaya, Ayhan  
Smith, Charmayne  
Shahin, David<sup>3</sup>  
Ronchetto, Erica  
Perrey, Tayler Wayne

##### **Research Faculty**

Dr. Jeremy Watts

##### **Faculty**

Dr. Richard Brow  
Dr. Fatih Dogan  
Dr. Bill Fahrenholtz  
Dr. Greg Hilmas  
Dr. Wayne Huebner  
Dr. Mary Reidmeyer  
Dr. Jeffrey Smith  
*Emeritus*  
Dr. Darrel Ownby  
Dr. Delbert Day  
Dr. Harlan Anderson

## *New Members*

The Missouri Chapter of Keramos continues to grow by recruiting the best materials students in the department. We hope that all of our initiates have a desire to become professional leaders both during the remainder of their time as students and after graduation. Our chapter uses an application process to select new members of the fraternity. These applications help the current officers learn about the applicant's interests, personal, and career information as well as the applicant's reasoning for requesting membership into Keramos. This was put into practice to find members that will be committed to putting forth the time and effort it takes to make Keramos the best organization possible.

The Missouri Chapter of Keramos has grown over the past year, initiating new members into the organization. During the 2012 fall semester, 12 qualified and outstanding new members were initiated on December 12<sup>th</sup>. There was also interest in recruiting in the spring of 2013, but several factors, such as co-ops, kept the potential recruiting class small. It was decided by the executive board to not have an initiation for spring of 2013 and ask all potential applicants to wait until the next fall recruitment. This was agreed on by the students that were interested and many are very excited to join in the upcoming fall semester.

The initiation process has several requirements each new member must complete. The first is attendance at an etiquette dinner put on by the chapter. This is a formal dinner designed to teach students about proper etiquette during any professional setting. A slide show was prepared and given by Dr. Fahrenheitz, and it was a great first opportunity for the new recruits to get to know other Keramos members.

Potential members were also required to attend the fall career fair. Each student had to turn in a resume to Keramos and then visit at least three different companies. The students provided at least three business cards to prove that they had completed the task. This allowed the students to become familiar with talking to potential employers and helped to develop their interpersonal skills.

Another requirement was the creation of Keramos plaques. This year, plaques were made of clay. Each pledge was required to roll out his or her own clay piece and cut it to the standard of the fraternity badge. The plaques were fired and each initiate glazed the plaque in the Keramos colors. Pizza was served and several current members came to help the initiates. Many of the recruits commented that it was a nice way to get to know one another and current members. Several have also said that they would make sure to help out next year with plaques in order to provide a similar experience for new recruits.

The last requirement for initiation into Keramos was the completion of a pledge quiz. Initiates must pass a pledge quiz that contains questions regarding the history of Keramos, the Missouri Chapter, and ceramics in general. The quiz is also another way for new members to interact and network with older members.

Following the completion of all requirements, the recruits were initiated. For the formal initiation attendees were required to wear business attire and the professors dressed in caps and gowns. Following the ceremony, the new members were treated to a congratulatory dinner. The plaque signing event is held during dinner where other Keramos members and faculty signed each new member's plaque. The best made plaque



was chosen by the faculty members and this new member was awarded a prize. This year, Caroline Murphy won best plaque.



*Current and Newly Initiated members at Fall 2012 Initiation*

## V. Missouri University of Science and Technology Honorary Keramos Nomination



Dr. S. Jill Glass received her Bachelor of Engineering degree in Ceramic Engineering from McMaster University in Hamilton Ontario in 1984. She obtained her M.S in 1987, and her Ph.D. in 1990 in Ceramic Science from Penn State University. Her graduate work under Dr. David Green covered the processing and mechanical properties of novel infiltrated alumina-zirconia composites. Jill joined Sandia National Laboratories in 1990 as a Principal Member of the Technical Staff and has since led and contributed to research, development, production, and failure analysis activities focused on the

mechanical properties of glasses and ceramics. Her areas of research include joining, ceramic powder compaction, stressed glasses, fragmentation of brittle materials, cermets, and glass ceramics. Jill has 45 publications, several book chapters on the mechanical properties and characterization of ceramics, and three patents. She has taught short courses on ceramics and glass failure analysis. Jill has received three Sandia President Quality Awards and the American Welding Society Peaslee Brazing Award.

Jill has been very involved with activities supporting the American Ceramic Society (ACerS). She is the past Chair of the ACerS New Mexico Section and served as the Sections Counselor. She has served as program Chair for the Annual Rio Grande Symposium on Advanced Materials and on the Symposium organizing committee. Jill served as the Program Chair for the Basic Science Division and is the BSD program co-chair for the 2009 annual and PacRim meetings. She has organized ACerS symposia including two for the BSD Sosman Award Lecture. She was the 2007-2008 Chair of the ACerS Awards committee and has served on the PACE Award, the Sosman Award, the Innovations in Glass Contest, and the Stookey Lecture of Discovery Award committees. Jill was the recipient of the 2001 ACerS Karl Schwartzwalder-Professional Achievement in Ceramic Engineering Award

Dr. Glass has contributed to the community by serving as a science fair judge at local schools. She has been a section organizer for the 2007 Intel International Science and Engineering Fair in Albuquerque, and has presented at the annual School to World Day (8<sup>th</sup> graders) and the 2008 Expanding Your Horizons Conference (6-12 grade girls). She teaches at the annual ASM Materials Camp for teachers in Albuquerque and has been an Adult Basic Literacy tutor.

Due to a miscommunication, our nomination for honorary Keramos was unsuccessful. Jill Glass is currently a member of Keramos and therefore ineligible to receive this award. However we still wanted to honor her for her service to the ceramics community.

**MSM/UMR/S&T Keramos Chapter Honorary Member**

1947 John C. Hostetter	1990 Daniel Armstrong
1948 Frederick Norton	1991 Larry Heying
1950 Paul Smith	1992 Richard Hagni
1953 Charles Smith	1994 Daniel Stutts
1961 William James	1996 Bill Hibler
1970 John Arthur	1997 Kent Peaslee
1970 John Holt	1998 Eric Schramm
1971 Harlan Smith	1999 Ken Goretta
1973 Hector McDonald	2000 Terry Tiegs
1975 Leroy Hart	2001 William Dawson
1977 Manfred Wuttig	2002 Carl Moody
1978 Paul Cash	2003 Scott Miller
1980 Edward Epstein	2004 Chris Ramsey
1981 John Bartel	2005 Ted Day
1983 Melvin Churovich	2006 Ron Kosher
1984 Don Sparlin	2007 Eric Bohannan
1985 John Dial	2008 Matt O'Keefe
1986 Chandra Ray	2009 Ted Ruppert
1987 Mohamed Rahaman	2010 Sam Stang
1988 Lokeswarappa Dharani	2012 Cindy Schwartz
1989 James Stoffer	

## VI. Treasurer's Report

### A. *Bank Account*

Date	Reason	Debit	Deposit	Total
3/19/2012	Doughnuts	13.59		351.04
4/2/2012	Doughnuts	8.35		342.69
4/5/2012	Alex's Transition Dinner	81.58		261.11
4/9/2012	Doughnuts	8.35		252.76
4/9/2012	Frames	43.87		208.89
4/16/2012	Doughnuts	8.35		200.54
4/19/2012	Reimbursement - Catie Mohrmann, Gifts for awardees	55.00		145.54
4/27/2012	Shipping of gift to distinguished alumnus	15.86		129.68
2/5/2013	Professional Development Lunch	94.98		34.70
2/5/2013	Deposit from cash and check		30.00	64.70
2/27/2013	Deposit check from nationals		113.00	177.70

### B. *Cash Account*

Date	Description	Debit	Deposit	Total
9/6/2012	In bag			305.51
9/15/2012	Plate for award	30.11		275.4
11/1/2012	Mini Etiquette Dinner at Matt's Steakhouse	155.81		119.59
2/5/2013	\$20 to account	20		99.59
3/20/2013	Pizza for lunch	29.93		69.66
4/10/2013	Dues		170	<b>239.66</b>

## VII. Chapter Activities

### *A. Fundraising*

Fundraising is an essential function of any organization. The biggest fundraising event this semester is the sale of customized "Padfolios." These will be black, padded folders with the material science department logo. They are used to hold resumes and notepaper for students at career fairs and interviews. We expect to sell only part of the initial inventory the first semester and the remainder will provide future income.

There is also a plan to sell hotdogs and burgers on campus as the weather warms up this spring. The sale will be April 24<sup>th</sup> and 25<sup>th</sup> during the lunch hours.

### *B. Educational Outreach*

#### **Open House**

Undergraduate students, including some Keramos members, help the department with open houses during the year. High school students come to tour campus and get a feel for different departments. The Materials Science and Engineering Department provides a pizza lunch and there are department posters set up in the common area. Keramos members help out by talking to students to get them interested in materials science and the department. S&T students bring groups of potential students to our undergraduate lab to introduce them to different ceramic topics. Demonstrations of glass, electronic materials, thermal shock, and silly putty are all done. Glass demonstrations include breaking tempered glass, stress and annealing, as well as pouring glass and pulling fibers. Students are introduced to the many applications of ceramics in electronics, piezoelectric materials, and single crystals of silicon. Thermal shock demonstrations are done with quenched alumina media and bond rigidity is demonstrated by racquet balls frozen in liquid nitrogen. Keramos students enjoy talking with prospective students about the fun, as well as the challenges, of studying for a ceramic engineering degree at S&T.

#### **WYSE Academic Challenge**

The Worldwide Youth in Science and Engineering (WYSE) 2012 finals for Missouri were held at Missouri S&T. Dr. Bill Fahrenholtz, a curator professor of ceramic engineering at Missouri S&T, organizes the WYSE program for the state of Missouri. High school students are tested over subjects ranging from Chemistry and Physics to Computer Science and Engineering Graphics. Students are recognized for high scores in the different subjects and schools are also recognized with the highest overall scores. Although Keramos did not set up this event, members participated to assist Prof. Fahrenholtz.

#### **Boy Scout Merit Badge University**

On February 16, boy scouts from all over Missouri converged onto the Missouri S&T campus for the annual Merit Badge University. Dr. Wayne Huebner, professor and chair of the Materials Science and Engineering Department, led a session on composites for the scouts to earn their composite materials merit badge. The session discussed the basics of composites materials, their applications, and how to safely handle them by

understanding Materials Safety Data Sheets (MSDS). In order to earn their badges, the scouts had to complete a project using composite materials. Their project was to glue a layer of tissue paper around the outside of a Styrofoam airplane, thereby increasing the plane's tensile strength. Material Advantage organized the projects and volunteers with Keramos members and other students in the department volunteering to oversee the scouts, answer any of their questions, and dry the glue with hair dryers so they could complete the planes faster. A few members also made their own planes. Throughout the day, the scouts took tours of the various materials labs on campus including the composites lab and the foundry. At the end of the day, the scouts took their planes outside and flew them to see how the tissue paper had increased their durability. The day was very successful for the scouts and volunteers alike.



*The scouts and volunteers working on their airplanes.*

### *C. Professional Development*

#### **Etiquette Dinner**

Last fall, we had our 4<sup>th</sup> annual Etiquette Dinner, and it continues to grow; we had almost 30 members in attendance. We had more participation this year than ever before, and we have high hopes that the 5<sup>th</sup> Etiquette Dinner will be even better. This dinner is one of the ways we ensure that Keramos members are well prepared to represent the profession and the fraternity in a professional manner after leaving school; for that reason, we have continued to require new pledges to attend. It also serves as a good way for the current members of the chapter to meet some of the new pledges who will carry on the tradition.

This year, Dr. Bill Fahrenholtz gave the presentation at the dinner, making him the second presenter for the Etiquette Dinner. As usual, it consisted of a three-course meal that was served by Chartwells, with a presentation on proper etiquette occurring all throughout the dinner. Dr. Fahrenholtz kept the humor alive, and both returning and new members enjoyed the faculty's way of showing improper behavior.



*Dr. William Fahrenholtz showing proper place setting during an etiquette dinner*

#### **Weekly Seminar Speakers**

An event that sets ceramic and metallurgical engineering students apart from their peers at Missouri S&T is the weekly opportunity to hear seminars given by invited guests, instructors, alumni, and fellow students on topics related to their field of study.

Once a week the ceramists and metallurgists meet for one hour to listen to these speakers and ask questions. This is an excellent opportunity for all members of the department to learn about the state of the art processes and technologies in the material science field. The seminars are not limited to only those in the department, so it is a great recruiting tool; additionally, prospective students can meet with fellow Keramos members to talk about ceramics and the department.

The speakers cover a wide variety of topics; most have made a significant contribution to their field. The speakers for the past year were as follows:

<b>Date</b>	<b>Speaker</b>
Sept. 23	Dr. Wayne Huebner
Sept. 30	Dr. Mariesa Crow
Aug. 6	Adrienne Neckermann
Aug. 13	Dr. Kathy L. Hayrynen
Aug. 20	Rick James
Aug. 27	Jump Start Your Future Seminar
Oct. 4	Graduate Student Speakers
Oct. 11	Dr. Scott Morrison
Oct. 18	Dr. Jochen Marschall
Oct. 25	Graduate Student Speakers
Nov. 1	Dr. Edgar Lara-Curzio
Nov. 8	Dr. Jason D. Nicholas
Nov. 15	Dr. James Reck
Nov. 22	Thanksgiving Break
Nov. 29	Graduate Student Speakers
Dec. 6	Senior Design Poster Presentation
Jan. 24	Dr. Wayne Huebner (*Attendance Required by All)
Jan. 31	Kent Peaslee, AIST President (Hilmas)
Feb. 7	Steve Martin, Iowa State (Dick Brow)
Feb. 14	Robert W. Schwartz, University of Missouri System, Chief of staff
Feb. 21	Prof. David P. Field, Washington State University (Mohsen)
Feb. 28	Curators' Bill Fahrenholtz (Wayne Huebner)
Mar. 7	Steven Ashlock and Jim Steibel*(Keramos Group)
Mar. 21	Aligul Buyukaksoy, Carlos Castano Londono, and Eric Neuman (MSE 410-Greg Hilmas)
Apr. 4	Dr. Sylvia Johnson, NASA (Bill Fahrenholtz)
Apr. 11	Kathy Flores, Washington University (Matt O'Keefe)
Apr. 18	MSE 410 (Greg Hilmas)
Apr. 25	Matt Hall, Alfred University (Bill Fahrenholtz)
May 2	John Elliott Lecture, Prof. Geoffrey Brooks (Kent Peaslee)
May 9	Senior Design Presentations

There were two lectures that Keramos hosted this past year. This year Keramos sponsored a seminar event that featured several student members giving talks about various internships, co-ops, and undergraduate research opportunities. Three students



spoke at this seminar. This was an opportunity for members to get in front of an audience and practice their public speaking skills and also allowed them to share their work. The speakers also discussed how they obtained their opportunity and gave hints and suggestions to further help students who are interested in finding work.

Keramos was scheduled to host the spring seminar on March 7<sup>th</sup>. However our speaker Kathy Sevenser could not make it due to poor weather conditions. Instead a presentation on the student competitions was given by our Herald, Steven Ashlock. This outlined the current competitions available for material science students to get involved and introduced a new ceramics disc golf competition. An open forum style discussion was opened to suggest competitions for the metallurgical engineers. Afterwards, Jim Steibel gave a brief talk about his career path and the current opportunities available at General Electric Aviation.

### **Graduating with Honors**

This is a program that is designed highlight the achievements of highly active Keramos members. A weighted points system based on seven criteria was developed. The criteria include attendance(s) at the annual Materials Science and Technology (MS&T) conference and other professional conferences; working as a co-op student, summer intern, or 3 semesters of undergraduate research; holding an officer position in an MSE student group; recruiting off-campus; presenting to Keramos or the department about a co-op or internship; attending the department etiquette dinner or other etiquette dinners on campus; making an oral or poster presentation at a technical conference; and serving as an officer in a recognized student organization on campus. These events all promote professional development. Those meeting the criteria will be awarded a certificate and a Keramos pin at the Spring Banquet.

### **Graduate Student Round Table**

Keramos organized a round table event for students interested in and considering attending graduate school. Dr. Greg Hilmas hosted professors, current graduate students, and undergraduates at his house for a potluck dinner and discussion about graduate school. After dinner, the discussion began with the graduate students and professors explaining why they chose the career paths they did. The rest of the discussion was fueled by students asking questions as well as tips and advice from graduate students and faculty.

### **Monthly Luncheon**

Starting this spring monthly luncheons were held for Keramos members. Lunch was provided by Keramos. These luncheons were a chance to socialize with members of the fraternity. A short presentation about professionalism was given at each luncheon. The presentation for the first luncheon was given by the Materials Science and Engineering Department Chair, Wayne Huebner, over his past experiences in Keramos and how this has helped him with his career. The second was given by graduate students about their current research and opportunities for undergraduate research available in the department. Presentations for the upcoming luncheons include professionalism when sending emails presented by our chapter president Jeff Josken, and there are plans to have

Kathleen Sevenser attend one and give a short talk on professionalism. Hopefully these luncheons will continue through next year.

### **Networking Events**

In the past year it was decided that a new committee was to be created: the networking committee. This group would be in charge of networking opportunities, community outreach activities, and social events for the chapter. The committee is headed by the Herald and all members are welcome and encouraged to join. It is a good way to get younger members involved and creates many opportunities for members of Keramos to interact with one another outside of classes. The goal is to have one networking event per month.



*Members enjoying Bowling Night*

The first year of this new committee has been busy. Our first activity was to hold a dessert and board game night at the end of the fall semester. This was scheduled the week before finals in an attempt to help students relax. Root beer floats were provided by the chapter and other members brought food in a potluck fashion. Students also brought board games to play. In addition to the social aspects, part of the room was set aside to allow students to study together for their upcoming tests. Coffee was provided by Keramos to help the tired students. Attendance for this event was around twenty students and even a few professors stopped in to say hello.



*Members participating in desert and board game night before finals*

The committee hit the ground running in the spring semester. The first activity planned was a bowling night in February. Keramos reserved lanes for the students on quarter bowling night. Around ten students showed up for the event. The night was a great success and there has been a push for more bowling outings.

In March the networking committee ran the Keramos Cookout event. Members and faculty gathered to enjoy grilled food and each other's company. Food was provided in a potluck fashion. Hot dogs and burgers on the grill were provided by the President and cooked by the Herald. This was a great way for the students to connect with their professors in an environment other than the classroom. Members of all classes were in attendance which allowed newer members to get to know the older students.

The last outing of the year will be a park clean-up and kickball event in April. Material Advantage has organized the park clean up, and Keramos students are encouraged to attend. Students will gather at a local park to clean up walking trails and other common areas in the park. The clean-up is planned for the morning hours with a lunch following consisting of hamburgers, hotdogs, side dishes, and desserts to be brought by students. After lunch, the members plan on a game of kickball. This will be another good way to get to know fellow members as well as help out the local community.

The last outing of the year is planned as a park clean-up and kickball event in April. Material Advantage has organized the park clean up, and Keramos students are encouraged to attend. Students will gather at a local park to clean up walking trails and other common areas in the park. The clean-up is planned for the morning hours with a lunch following consisting of hamburgers, hotdogs, side dishes, and desserts to be brought by students. After lunch, the members plan on a game of kickball. This will be another good way to get to know fellow members as well as help out the local community.

#### *D. Service to the Ceramics Community*

##### **Student - Faculty Relations**

Throughout the year, Keramos was instrumental in organizing activities that promoted good student - faculty relations. Maintaining strong relationships between our students and faculty is a very important goal of our chapter. Coordinating events for the students and faculty to get together and have fun is a big part of the work of our chapter. These events are essential because they provide the opportunity for students to develop a good rapport with faculty but have fun at the same time.



*Executive board meeting to discuss upcoming events during semester*

##### **Spring Banquet**

The sixth Annual Spring Banquet for the Materials Science and Engineering Department will be held Thursday, May 2<sup>nd</sup> at Matt's Steak House. We are expecting approximately 120 attendees, which included students, faculty, and alumni. The distinguished alumni award will be presented to Rick Martin and Tim Miller. Distinguished Alumni awardees are discussed further below. Traditionally, the annual department awards ceremony follows the banquet. The awards will be given out during the event, such as outstanding ceramic and metallurgical engineering faculty, graduate students, graduating seniors and undergraduate students. Students in the department vote for faculty in both disciplines. The faculty choose the top three graduate students, graduating seniors and undergraduate students in both ceramic and metallurgical engineering and students submit the final votes.

##### **PCSA**

Students from Missouri S&T have been committed to improving the ceramics community on a national level. Students from our chapter have worked on the

President's Council of Student Advisors for ACerS. This past year Keramos student Amber Powell attended the annual meeting and worked on the programming committee and with the outreach committee throughout the year. One of her major projects was to help promote the PCSA creative writing contest by creating flyers.

### **Mock Interviews**

In the spring semester, Keramos organized practice interviews for the students in the department. Interviews were conducted by the faculty with the help of Keramos members. The purpose of these interviews was to allow the students to practice their interviewing skills. Keramos decided to put on the interviews because we felt like the practice interviews set up by the career center lacked the kinds of technical questions students might be asked by potential employers. The professors were able to ask these types of question as well as the character based questions the career center would have asked. Students could ask questions of the professors directly and were able to get immediate feedback and critiques.

Four students participated in the interviews in the spring. We had hoped more students would participate in the event but were pleased with the outcome and feedback the students provided. A survey was sent out to receive feedback and all of the participants seemed to have benefited from the experience and all felt that they were much better prepared for future interviews.

We plan on continuing these interviews in future semesters and to expand the event to all students in the materials science department. The plan is to hold the event in the weeks prior to the career fair each semester. We hope that this will properly prepare the students for their interviews with potential employers.

## *E. Alumni Engagement*

### **MSE Fall Picnic**

Members of Keramos attended the Materials Science and Engineering Department's annual fall picnic held on Monday, September 24, the day before the fall Career Fair. Alumni representatives from companies such as Nucor and Honeywell attended the picnic for the opportunity to network with current students and faculty. The picnic provides alumni the chance to learn about the current events on campus while students have the chance to meet and interact with alumni and learn about potential employers in a fun and informal setting before going to the formal Career Fair.

### **MSE Phone-a-thon**

During the week of October 29, ceramic engineering students, including most Keramos members, volunteered their evenings to participate in the department's annual phone-a-thon. The phone-a-thon is the primary fundraiser for undergraduate scholarships and laboratory equipment. All of the monetary donations are used to support students in the ceramic engineering program. Through the generosity of the alumni, every student in the department receives some financial aid. At the phone-a-thon, students correspond with alumni and inform them about activities within the department. Many of the alumni are excited to hear from current students and pleased to donate. This year the ceramic engineering students and faculty raised \$31,700.

### **Distinguished Alumni Awards**

This year the Missouri chapter wanted to continue the acknowledgement of the many accomplished alumni that have graduated from MSM/UMR/Missouri S&T. After conferring with the faculty, Tim Miller ('94) and Ricky Martin ('82) were selected to be honored. Both of these gentlemen exemplify the values and qualities that the chapter believes all young professionals and graduates should strive to espouse. We will have the honor to present Mr. Miller and Mr. Martin with this award at the Spring Banquet on May 2<sup>nd</sup> along with a small gift.

## *F. Biennial Convocation and Annual Meeting*

### **Annual Convocation**

As in past years, the Missouri Chapter of Keramos attended the Biennial Convocation at Pittsburg, PA in October. This Convocation gave chapters a chance to work together to brainstorm ideas and share methods that have proven successful for other chapters. At the convocation, representatives from each chapter of Keramos gave a presentation on events that the chapter has done over the past year. At this year's convocation the chapters discussed rule changes to the mug drop competition and whether or not to have the 2013 convocation at MS&T 2013 in Montreal. The Missouri chapter of Keramos was proud to earn Chapter of the Year award.

### **MS&T**

This year, Missouri S&T had an exceptional student showing at the Materials Science and Technology conference in Pittsburg, PA with 35 students in attendance. Many of the undergraduate students were in attendance at the talks on career and graduate school options. Missouri S&T was well-represented in all activities and events at the conference.

We were also well-represented in the mug drop competition submitting three mugs for dropping and another mug for the aesthetic competition. Three students, Ryan Wilkerson, Liz Reidmeyer and Becca Mullen submitted mugs for competition. The glass mug made by Liz Reidmeyer came third in the mug drop competition. Becca Mullen's entry in the most aesthetic mug competition tied for 1<sup>st</sup> with An Deng from University of Washington.

## *G. Inter-chapter Communications*

The Missouri S&T Chapter embraces the opportunity to meet and network with students from Keramos chapters across the nation. The MS&T meeting always allows us an opportunity to interact with the other chapters and to see the best practices these chapters utilize to run their organizations. In addition, the Missouri chapter is one of the regulars on the monthly teleconference with the Keramos Board of Directors. Many useful discussions and ideas have come from these meetings. These include fundraising ideas, support for the new ceramic disc golf competition, and ways to keep members involved in the chapters. A short article was submitted to be added to the Keragram to inform our alumni and other schools of various activities we have participated in, and that we are successfully promoting professionalism. Our chapter is looking forward to convention in Montreal in 2013 to learn new ideas to improve our chapter.

However, it is hard for our chapter to interact personally with other chapters due to the great distance between our university and others. Beyond sending emails to other chapter representatives, it is quite difficult for inter-chapter relations for our university. The chapter feels that we do a good job despite the difficulties. The chapter tries to be a leading example for other chapters.

## VIII. Summary Article

This has been a very successful year for the Missouri Chapter of Keramos. We have created two different committees to help increase member participation: networking and fundraising. We had noticed a lack of participation in the general chapter apart from the executive board. One of the best ways to increase the participation is by giving members more responsibility and allowing them to rise to the occasion. The committees allow the chapter to do more by delegating more power away from the executive board and increase chapter participation.

The networking committee has been a huge success. We have had a great number of members participating in events and this has led to an overall more enthused chapter. There have been great turnouts in our other events and a greater experience for members of the fraternity. Although all networking events are not completely professional in nature, they do help teach members the art of networking and getting to know colleagues. This skill is vital in any professional environment.

The fundraising committee has also shown great promise. Fundraising is almost always the most difficult aspect of any club or organization. This is made even harder when trying to incorporate fundraisers that follow along the ideals of professionalism of the fraternity. Gathering ideas from many members of the fraternity has given two great ideas for fundraising. The padfolios will give students a very memorable item as well as be extremely useful in any professional setting. The grill out planned in conjunction with the glass sale should prove to be a very symbiotic relationship.

The chapter has participated in many different events that help to spread knowledge of ceramic engineering and promote science and engineering in general. Events such as the Boy Scout Merit Badge University and open houses are a great way to expose young students to ceramic engineering. We have also had participation in volunteer events, such as the canned food drive held by MA and Gaffer's Guild during late fall and the MA spring park clean up.

The monthly luncheons have proven to be a great success. The events provide a good mix of networking, professionalism, and enjoyment to students. The informal setting allows members to get to know one another and get a different perspective from graduate students and faculty. We hope to continue this event and get people to look forward to it every month.

The mock interviews also proved to be very effective. Although the student and faculty participation was not ideal, the interviews themselves went very well. The students had great feedback and the faculty seemed very happy with how the students performed. The interviews this semester set the stage to be even more successful next year. Hopefully, this will become a reoccurring event that will help the department for years to come.

Unfortunately this year, we were unable to name a Keramos Honorable Member, as Jill Glass was already a member of Keramos. However, we were still honored to have her both speak and be associated with our chapter of Keramos. We will hopefully be able to nominate an Honorable Member next year.

We have had some excellent professional development events as well. Students were offered practice interviews by faculty and graduate students along with the help of current students. The graduate student round table gives undergraduates a great opportunity to talk to graduate students about the prospect of graduate school. The



professional events have shown great results, as both student members and faculty have commented on their success.

The main achievement of this academic year has been the increased enthusiasm and member participation of the chapter. We have hosted many events to allow our members to get to know one another better and develop as students and professionals. The chapter has really responded to this, and has shown great vitality, especially this last semester. With active members, it is much easier to run a successful organization. The committees proved to be extremely effective not only in improving the chapter in terms of efficiency, but also allowing future leaders of the fraternity to get involved with planning events. The networking events have really increased member participation by creating a stronger bond between members, which is its main goal. A chapter that is more closely connected will run much more efficiently and will be much more enjoyable organization. Both of these, along with the monthly luncheons, have changed this chapter for the better, and invigorated the next wave of leaders of the fraternity.