

UNIVERSITY OF

ILLINOIS

AT URBANA-CHAMPAIGN

**Keramos Annual Report
Fall 2014 – Spring 2015**

**University of Illinois at
Urbana-Champaign**

Chapter Advisor Executive Summary

Building on a remarkable year last year where the University of Illinois Chapter won the national prize for being the most improved chapter, this year has seen the continuous “sky rocketing” of activity within the Illinois Chapter. As demonstrated by the attached annual report, the students surged ahead with an unprecedented number of activities on all fronts. It is to their credit that the students pulled themselves up “by their own boot straps”, with minimal assistance from the Faculty. In my 28 years as a Faculty member at Illinois I can say without a doubt that this is the most active I have seen the Illinois Chapter in any of the past years.

These activities ranged from helping less talented classmates by tutoring, organized weekly study hours within the engineering library, and mentoring of lowerclassmen by upperclassmen, both formally and informally during a host of social activities. Several members of Keramos took the initiative to return to their high schools to educate high school students about materials science, including ceramics. It is laudable that in these days of merged “materials science” student organizations, the Keramos student Society has made a particular effort to retain its unique ceramic character by organizing a weekly “Play with Clay” experience attended by an average of 6 students per week. This naturally prepares the students to make the famous ceramic pigs to be handed out to faculty during the Annual Awards Banquet, which was formerly known as “The Pig Roast” where Faculty would be “roasted” during student skits about incidents which took place during the academic year, a source of light hearted joviality.

Following up on this special interest in ceramics, the Keramos students organized two exhibits for the annual Engineering Open House, where bus loads of students and families from Chicago and neighboring areas come to campus and explore what is happening in Engineering at Illinois. One exhibit focused on Geopolymers for Sustainability and Geoffrey Geopolymer, a friend of Smokey the Bear, demonstrating how to slow down global warming by reducing the CO₂ footprint of Portland cement by substituting it with geopolymers. Other useful properties were also demonstrated such as thermal shock resistance against exposure to an oxyacetylene torch, and toughness against dropping on the floor. The exhibit won first place in its category of “Encore Technical” and was the highest place exhibit in the MatSE Department. The annual “Mug Drop” competition was also well represented by the Illinois Chapter where the geopolymer mugs, while not monoliths, nevertheless survived 8 meter drops.

On a more heartwarming and commendable note, every week three members of Keramos take time to cook dinner for 65 homeless people at the local Salvation Army. On a professional level the planned activities have and will continue to include activities to foster interviewing and networking skills, as well as awareness of and interaction with 3 visiting companies, in particular those on the Department of Materials Science and Engineering Alumni Board.

In summary, the Illinois Chapter is vibrant with activity on both a personal as well as a professional front. As the faculty advisor, I am proud to be a part of the Illinois Chapter.

Annual Plan for Fall 2014 - Spring 2015

The Keramos Chapter at the University of Illinois has large plans for the upcoming year. With involvement from members growing, we plan to host more events throughout the year. We will be offering exclusive opportunities for members to interact with Alumni recruiters during career fair season by hosting company information sessions and professional workshops with our campus career services center. We want to encourage student-professor interaction by hosting casual department lunches. We want to reach out to recent alumni in hopes of guiding our members with their experience after college. We are hoping that this will motivate students to focus on course work that is highly recommended and useful according to alumni. We have also been working to improve our initiation process so that potential members are required to attend a certain number of events before they are initiated. Our hope is that the improved attendance will uphold or reputation on campus. We are coming up with new ideas to improve attendance at events. We were successful with many social events this year so we are hoping to expand this role by working with other organizations on campus. As a whole, the chapter is in an upwards motion, with improved membership and benefits.

2014 - 2015 Executive Officer Board

President Michael Sarantos [REDACTED] [REDACTED] @illinois.edu	Co – Herald Michael Hu [REDACTED] [REDACTED]
Vice President Ann Choi [REDACTED] [REDACTED]	Co – Herald Kai Wells [REDACTED] [REDACTED]
Treasurer Kimberly Campbell [REDACTED] [REDACTED]	Professional Chair Melissa Goetter [REDACTED] [REDACTED]
Secretary Zoey Sowinski [REDACTED] [REDACTED]	Social Chair Colton Adamick [REDACTED] [REDACTED]

2015 - 2016 Executive Officer Board

President Kimberly Campbell [REDACTED] [REDACTED] @illinois.edu	Co – Herald Michael Hu [REDACTED] [REDACTED]
Vice President [REDACTED] [REDACTED] [REDACTED]	Co – Herald Jared Cooney [REDACTED]
Treasurer Jai Karnik [REDACTED] [REDACTED]	Professional Chair Melissa Goetter [REDACTED] [REDACTED]
Secretary Dustin Reisberg [REDACTED] [REDACTED]	Social Chair Sarah Fraser [REDACTED] [REDACTED]
	Service Chair Connor Bailey [REDACTED]

Current Members

Name	Date Initiated	Current Position
Aaron Zhao	Spring '12	
Adam Brown	Spring '14	
Aik Jun Tan		
Akshay Arun Murthy		
Alejandro Firpo	Fall '14	
Alex Trick	Spring '14	
Ally Brusich	Spring '14	
Amol Gokhale	Spring '12	
Andrew Buhl	Fall '14	
Andrew Lee		
Andrew Nelson	Fall '11	
Andrew Zhao	Spring '12	
Aniruddh Shivram	Spring '12	
Anisa Nuanes	Fall '14	
Ann Choi	Spring '12	Vice President
Anna Jedralski	Spring '14	
Anna Mast	Fall '12	
Arjun Balwally	Spring '14	
Arun S. Nair	Spring '12	
Arvind Ramaiah	Spring '14	
Arvind Srikanth	Spring '12	
Athanasios Sofronis	Spring '12	
Athena Lin	Spring '14	
Benjamin Bryon	Fall '14	
Benjamin Jay Wooley	Spring '12	
Bill Andrews	Spring '12	
Brendan Eng	Spring '14	
Brian McDonald	Spring '14	
Cameron Rosenthal	Spring '14	
Carrington Watkins	Spring '12	
Charles B Stovall	Spring '12	
Clayton Sharp		
Colin Ringel	Spring '12	
Colton Adamick	Fall '12	Social Chair
Connor Bailey	Spring '14	
Curtis Charles Baker		
Daniel Li	Fall '12	

Daniel McGovern	Fall '12	
Daniel Roper		
David Christianson	Spring '14	
David Kukla		
David Priest	Spring '14	
David Yoon	Spring '14	
Deepa Kote	Spring '14	
Deepak Mani	Spring '14	
Derek Kwok	Spring '14	
Diane Kuai	Spring '14	
Douglas Hansel	Spring '12	
Drew Curtis		
Dustin Reisberg	Fall '14	
Emily Lindgren	Fall '14	
Eric Anderson	Spring '12	
Eric Przybylowski	Fall '12	
Gabriel Velarde	Spring '14	
Grace Pakeltis	Spring '14	
Huang Huang	Fall '11	
Hui Lin Yang	Spring '12	
Hye Jin Lim	Spring '12	
Isaac Hoffman	Spring '12	
Jai Karnik	Fall '14	
Jane Jeayeon Yoo	Fall '12	
Janna Eaves	Fall '12	
Jared Cooney	Spring '14	
Jean Jiang		
Jennifer Huffman		
Ji Ho Kim		
Jiwoo Yu	Fall '12	
Joanna Lin	Fall '14	
John Miller	Spring '14	
Jon Wilson		
Jonas Felipe Kurniawan	Spring '12	
Joseph Cohen	Fall '14	
Julia Zuo	Spring '14	
Justin Betancourt	Spring '14	
Kacper Lachowski	Spring '14	
Kai Wells	Spring '14	Co-Hearld
Kaihang Luo		

Kelsey Wu	Fall '11	
Kenneth Jabon	Spring '14	
Kevin Suhadi	Spring '12	
Kimberly Campbell	Spring '14	Treasurer
Kirsty Feng	Fall '14	
Konrad Ryba	Spring '14	
Mantian Xue	Fall '14	
Matthew Cheng	Spring '14	
Max Gruber	Fall '11	
Melanie Daugherty	Fall '12	
Melinda Tom	Spring '12	
Melissa Goetter	Spring '14	Professional Chair
Michael Di Mare	Fall '12	
Michael Hu	Spring '14	Co-Hearld
Michael Sarantos	Spring '12	President
Michael B Sun		
Michael Hongyi Wu	Spring '12	
Mike Nauheimer		
Mitchell Bigelow	Spring '12	
NaKyung Lee	Spring '14	
Nick Palcheck	Spring '14	
Nicole Crosby	Spring '12	
Nicole Ernat	Fall '12	
Nikolas Van Winkle	Spring '14	
Olivia Rogers	Spring '14	
Paul Ng	Fall '14	
Raissa Yona	Spring '12	
Ryan Hurley	Fall '12	
Ryan Smith		
Samantha Tatar	Spring '14	
Samuel Kaufman	Spring '14	
Samuel Mo	Spring '12	
Sanggyun Kim	Fall '12	
Sarah Fraser	Fall '14	
Satoshi Takekuma	Fall '14	
Scott Biesboer	Spring '12	
Scott Lyons	Fall '12	
Sean O'Neill	Fall '14	
Shamalee Goonetilleke	Spring '14	
Sho Harisawa		

Soham Ali	Spring '14	
Steven Hoppe	Spring '14	
Steven Simpkins	Spring '12	
Suraj Dhanak	Spring '14	
Tara Cullerton		
Taylor Perez	Spring '12	
Tyler Arl	Spring '12	
Vijay Rajendran	Fall '12	
Vijesh Tanna		
Waltraud M. Kriven		Faculty Advisor
Wang Rui		
William Larson		
William E McCracken Jr.	Spring '12	
Xuejiao Li		
Yanfu Lu	Fall '12	
Yelizaveta Fedonina		
Yen-Chu Tu	Fall '12	
Yiwen Sun	Spring '12	
Yiyuan Yang	Spring '14	
You Wu	Spring '12	
Zach Hoffman	Fall '14	
Zhen Sun		
Zixing Wang	Spring '12	
Zoey Sowinski	Spring '12	Secretary

Treasurer's Report

Between the dates of 4/15/14 – 4/14/15, Keramos at the University of Illinois at Urbana-Champaign has taken in total \$4,873.82 in membership dues and other sources of economic support. We will be initiating the Spring 2015 members later in April. Our expenses have totaled in \$9,192.01 in many of the events that we have hosted for our general body, including a centennial gathering. Further expenses for the rest of the 2014-2015 academic year have not been included.

	Income
Spring 2014 (late) Membership Dues	\$50
Fall 2014 Membership Dues	\$750
Centennial Celebration Fee	\$783.08
MS&T 2014 Travel Support	\$2,106.20
Exec Board Bonding Support	\$525
Play With Clay Permanent Equipment Support	\$525
FY13 Interest Allocation	\$134.54
<i>Total</i>	<i>\$4,873.82</i>

	Costs
Initiation Fees (to Nationals)	\$510
General Meetings (Food)	\$883.16
Engineering Open House (2015)	\$105.11
Social Events	\$605.21
Professional Events (Food)	\$172.30
Professor Lunches	N/A (Funded By MatSE Department)
Initiation Dinner (Fall 2014)	\$160.98
MS&T 2014 Reimbursements	\$2,328.83
Centennial Celebration	\$4,228.19
Play with Clay Permanent Equipment	\$130.68
Miscellaneous	\$67.55
<i>Total</i>	<i>\$9,192.01</i>

Initial Balance	\$11,895.95
Current Balance	\$7,577.76

Chapter Activities

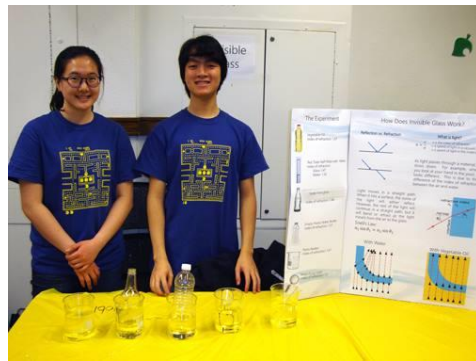
Engineering Open House



Every year, thousands of students, parents, and professors visit the College of Engineering at the University of Illinois for the annual Engineering Open House in March. Throughout the weekend, all student engineering societies, research groups, and project based teams come together to exhibit their work to demonstrate different engineering concepts to the community. There are various demonstrations ranging from eco-fuel vehicles, and 3-D printing exhibits. There are also guest speakers, and a Tesla coil concert performed

behind Engineering Hall on Friday night. There are also judges who visit every exhibit and award prizes in several categories.

For Engineering Open House, Keramos hosted two exhibits: non-Newtonian fluids and Invisible Glass. The non-Newtonian fluids (pictures below) attracted a variety of people, from small children to professors and parents. It was very interactive, and many people learned about the different kinetic behaviors in liquids. Large batches of corn starch and water were mixed in order for people to physically experience the shear thickening phenomena. The Invisible Glass demonstration was new this year. Using several glass materials with different refractive indices and vegetable oil, we demonstrated how light travels through a material. We showed how materials with the same refractive index can make them become invisible as light does not need to bend when it travels across both materials.



Professional

One event we try to hold monthly is the professor lunch, where professors are invited to a casual lunch to interact with our students. At the March Professor Luncheon, Keramos hosted Lecturer Matt Goodman and Professor Daniel Shoemaker. Topics which were discussed include pizza topping choices, grad school applications, grad school recommendation letters, how to know if you want to go to grad school, the opinion on attending grad school at the same university as attended to earn the undergraduate degree, choosing a grad school with more than one research group that is of interest to you, and interesting/useful classes at UIUC. The April Professor Luncheon will host Professor Trinkle and Professor Schleife whose research are focused on computational materials, which has had growing interest from our students.

Social

MatSE Happy Hour is a weekly event where students of all ages enjoy age-appropriate beverages, talk and decompress after a long week of problem sets, exams or lab reports. The MatSE Back to School Barbeque was an outdoor picnic at a local campus park. We served food, had games, and had a good mix of upper and lowerclassmen, often meeting each other for the first time (due to its date soon after the start of the semester). Our trip to Curtis Orchard was a fun afternoon of apple picking, shopping in the novelty store, enjoying food, and taking funny pictures. The MatSE Fall Tour of Establishments invited students of all years to attend a scheduled visit to several Campustown evening establishments. Custom shirts were made and sold before the event, and attendees wore them. MatSE Video Game Night provided video game consoles that were hooked up to the projection system and to TV's and computer monitors. Students were able to play a variety of video games with each other. Food was provided, and some board games were played as well.

Herald

Keramos continues to encourage member bonding through weekly Play with Clay sessions. Play with Clay teaches members about the slip-casting method of preparing ceramic materials. Over the past year approximately 5-10 members have attended each Play with Clay session, as attendance was used to determine initiate eligibility for membership in Keramos. In the upcoming year, we plan to increase member involvement in Play with Clay sessions by introducing new features, such as a brand new pottery wheel that we are ordering this summer. We have learned more about how our kiln functions, which has greatly increased our processing speed and throughput.

MS&T

During the 2014 Materials Science & Technology (MS&T) Conference held in Pittsburgh, Pennsylvania, we sent 19 students to attend several talks and compete in the Student Speaking and Mug Drop competitions. The Illinois Chapter was represented by Mike Sarantos, Elizabeth Fedonina, Kai Wells, Colton Adamick, and Melinda Tom. We discussed with many different chapters on what we can do to grow as a chapter and as a national board. During the Keramos Convocation, our chapter won the Sapphire and the most improved chapter awards. Elizabeth Fedonina participated in the Student Speaking Competition, and made it to the semi-final round.



For the mug drop competition, we prepared four different mugs (two for drop height and two for aesthetics). One of our drop height mugs came in 2nd place, and one of our aesthetic mugs got recognized by ACerS. Also, due to a design issue, we were unable to participate in the disk golf competition. From this, the Materials Science and Engineering Department created a senior design project to understand proper material and design considerations for the Mug Drop and Disk Golf Competition.

Intersociety Conference

On November 7-8th, we helped present at the Engineering Council (EC) Intersociety conference. We presented how to network and cooperate with our department and professors. This included working with Material Advantage with their auction by socializing with professors in events such as rock-climbing, a 5K run, volleyball and basketball games, and professor dinners. We also learned how to improve interactions with professors by discussing new ideas like TED talks by professors and updating coffee chats with professors.

TMS

We were unable to attend the TMS conference in Orlando, Florida due to a conflict with Engineering Open House that occurred at that same date. However, we have found out that we will be able to attend the 2016 TMS conference in Nashville, Tennessee.

Keramos Centennial

To celebrate 100 years of Keramos Illinois, we hosted our centennial at the I-Hotel and Conference Center on February 21st. We invited alumni, other Keramos chapters, the Keramos national board, and MatSE faculty/staff. The event consisted of a networking session, a formal dinner and a brief presentation about the history of Keramos. We hope that this event will promote more alumni and inter-chapter interactions. We would like to thank everyone who attended our Centennial Celebration.



Keragram

This semester has been a busy time for our Keramos Chapter. Most of our time was focused on preparing for Keramos Centennial and Engineering Open House but we have been focusing on building up internally within our Fraternity while beginning to increase our visibility via Professor Lunches, Game Night, Play with Clay, and an intersocietal roundtable.



With our 100 year anniversary, we had a big gathering of alumni, students, other chapters and Keramos Nationals. We had a huge turnout from Missouri Science & Tech, for whom we held a campus lab tour. Centennial began with a networking event and ended in dancing. We are hoping to promote interaction with the MS&T chapter for the future.

During Engineering Open House, we hosted a Non-Newtonian fluids exhibit and an optical experiment called “Invisible Glass”. Large batches of corn starch and water were prepared in plastic containers to provide an interactive experience to better understand the shear thickening whereas vegetable oil and glassware was used to understand how light bends through materials. We also provided a tour for a group of middle school students from Peoria of our facilities.

We wish to provide more professional opportunities and events throughout this semester. In addition to professor lunches, we would like to host events that expose our members to corporate alumni.

With regards to social events, we held a game night where many members played video and board games. We had a fantastic turnout and everyone had a fun time! We are beginning to reach out to other societies to co-host social events.



We also had intersocietal roundtables with societies that are similar to ours including Theta Tau, OXE, HKN, and Tau Beta Pi. We discussed how to create opportunities for alumni to know how the societies they were once involved in are doing. We also focused on a MatSE feedback session for all students to critique and praise their courses, which would be synthesized and passed to the MatSE department.

Finally, we have elected our new board which we are in the process of transitioning right now, and we are brimming with new ideas to be implemented in the following school year!

Chapter Summary

The Keramos chapter at the University of Illinois is flourishing with over 60 active members. As a professional society, we are dedicated to enriching the academic lives of all our members. From a social aspect, we foster relationships throughout the college experience to create strong ties for alumni. As a result, we take pride in our alumni relations and the opportunities they provide for our members. By offering exclusive academic and professional opportunities for our members, we maintain a reputation of honor on campus.

The policy in our chapter is for all members to attend monthly meetings in which we discuss opportunities and ask the members for opportunities they would like to see. We generally hold social events after general meetings for members to bond with each other. The secretary of our chapter also sends out weekly email updates to inform members of events going on. We try our best to not only include Keramos opportunities, but also get invitations from other engineering and honors programs to attend events. We have weekly play with clay sessions where members are encouraged to come learn about the ceramics process. We also require our initiates to attend at least two play with clay sessions to create their own ceramic object or figurine. We believe that through these activities, our members are experiencing the traditions of ceramics and improving their academic experience.

The chapter holds a variety of professional and academic enhancement opportunities throughout the semester. Exclusive dinners with various corporate representatives give members opportunities to create a relationship with companies of interest. We also keep a running list of company information sessions on campus so that members can seek information on companies in their area of interest. Personnel from the career services on campus have come to general meetings to do resume reviews and mock interviews for our members. We believe these professional events prepare our members for post graduation opportunities and inform them of their options for employment in the corporate world.