

CERAMIC MUG DROP CONTEST

PURPOSE:

The purpose of the Ceramic Mug Drop contest is to promote spirited and collegial competition among students by demonstrating their prowess in manufacturing a ceramic mug possessing high strength, mechanical reliability, and aesthetics. The contest is organized by Keramos.

RULES:

1. All student members of Material Advantage are eligible to participate; entrants **DO NOT** have to be members of Keramos. All work on the mugs must be performed by students; Faculty members and non-students may only advise.
2. Each Institution may submit up to five mugs for judging.
3. Mugs must be made entirely from ceramic or glass materials, and may not contain any metal, plastic, paint, organics, or non-ceramic materials.
4. No commercially made parts may be incorporated in mugs, to include rods or pre-woven fiber mats. Raw materials such as powders, liquid precursors, chemicals, and fibers are legal to purchase and use to fabricate a mug; however, any woven textile fiber architecture created so as to reinforce the mug must have been fabricated by the students and not purchased.
5. All mugs must have a serviceable handle(s) which permits gripping and retaining a mug filled with at least 500 ml of liquid.
6. Dimensions of the mugs must not be greater than 25 centimeters in height, nor greater than 20 centimeters in diameter with the handle(s).
7. Mugs must be able to contain at least 500 ml and not more than 625 ml of liquid, and be useable for drinking purposes. Mugs must not decompose when they contain a liquid.
8. Mugs can be enameled or glazed, but cannot be painted or coated after final firing.
9. Mugs must be a single monolithic piece and the final mug (including all coatings, layers, etc.) must be fired or formed at a temperature of 300°C or higher. No parts may be glued or tied on after firing.
10. No poisonous materials, e.g., arsenic, are to be incorporated into the mugs. Prior to the contest, pertinent MSDS's must be submitted for verification of compositional safety.
11. The year of the contest must be inscribed (or glazed) into the surface of the mug. No paint or marker etc.
12. Only mugs made during the current academic year may be used.

JUDGING:

1. The judges of the contest will consist of at least 2 members of the Keramos National Executive Board
2. Each mug will be judged in the categories of drop strength and artistic merit (aesthetics.) The strongest mug will be named winner of the Mug Drop Contest and the most aesthetically pleasing/creative mug will be recorded as the "Best Looking" mug.
3. Before the strength test, each mug must be proven useable by a representative drinking liquid from it.
4. Mugs will be dropped in alphabetical order by institution name.
5. The drop test for evaluating strength will be performed as follows:
 - The original orientation of the mug will be with the base of the mug perpendicular to the floor
 - Each mug will be dead-dropped from a starting point of 30 centimeters from the ground
 - Those mugs which do not fail during the drop test are eligible for the next drop height.
 - The mug will be dropped from successively higher heights (15 centimeters greater each time) until it is broken.
 - "Broken" shall be defined as not being able to hold 500 ml of liquid without leaking, loss of handle(s), or loss of more than 20% of starting weight
 - An entrant may "pass" at any height; however, all mugs must be evaluated at the 30 cm, 105 cm, and 210 cm levels
 - The winner shall be determined by the highest survived drop height.
 - The maximum drop height that will be tested will be 400 cm.

PRIZES:

1. The winning mug (strongest mug) shall receive a \$100 award and a trophy
2. The "Best Looking Mug" award shall be awarded to the most aesthetically pleasing mug in the competition; the prize is awarded at the discretion of the judges.

CONTEST ADMINISTRATION:

1. The contest will be held during the MS&T conference each fall.
2. Please register your intent to compete no later than one week before the meeting by contacting the Keramos National Vice President (see Keramos website at www.ceramics.org)
3. Contest late arrivals will not be eligible to compete.
4. Winners will be announced in the Keragram and forever recorded in the Keramos Record book; pictures of the winners are often included in the ACerS Bulletin as well as the other Material Advantage Partner Society publications.