# **ACI UW**Fall Convention Newsletter

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UNIVERSITY of WASHINGTON

### **COMPETITION PREP**



# **Mix Days**

ACI UW began mixing in early September for the concrete cylinder competition, meeting 3-4 times a week to experiment with different mix designs for permeability and split tensile strength. Led by Vania and Mohammed, the team started with mixes that were more permeable, and then shifted to strength optimization. They found the perfect balance through trial and error, ultimately selecting a "Champion" mix that performed well in both areas.

# **Permeability Tests**

For the permeability tests, Kyle and Mohammed built a DIY Permeameter to measure flow rate through the cylinders. Securing the cylinders properly to ensure water flowed through them correctly took a lot of trial and error, as they tested various cylinders to get the most accurate data. Their persistence paid off, leading to a methodology that delivered reliable results!



# **Splitting Tensile Tests**

During testing, the team developed stations where cylinders were transferred to the testing room for split tensile strength tests after mold cutting, and permeability tests. Patricia, Kyle, and Vania led the operation of the universal testing machine, with the team ensuring accurate results at each step. This streamlined approach allowed for efficient and reliable data collection.

## **ACI CONVENTION**



# Pervious Concrete Cylinder Competition

The Pervious Concrete Cylinder
Competition was judged based on
performance in permeability and splitting
tensile strength. A total of 32 schools
participated in the competition. We proudly
secured **second place in the "Best in Show"**category—marking the first time in two
years that an American team has placed in
this category!

# Seminars & Socials

We had the opportunity to attend the High-Strength Concrete Seminar, Women in ACI (WACI) and Concrete Mixer networking events. At the seminar, we learned about material sourcing from around the world and material shortages. The WACI and Concrete Mixer networking events provided a great opportunity to connect with peers and professionals, and learn about the history of the organization.



# Student Forum & S805 Council Meeting

The Student Forum was a fantastic opportunity to share insights about the ACI UW Student Chapter and learn about the work of other student chapters. Following the forum, we were invited to attend the S805 Student Leadership Council meeting, where we provided feedback on the competition and shared experiences from our chapter. Thank you, S805, for the opportunity to collaborate on ACI student leadership!

# **FUN IN PHILLY!**



The team at breakfast with faculty advisor Fred Aguayo



2 AM run to the Rocky Statue before an early flight back to Seattle



A spooky visit to the Eastern State Penitentiary



The girls pose for a photo on the lawn of Independence Hall





# THANK YOU TO OUR SUPPORTERS

A huge thank you to our sponsors, professionals, and supporters for your invaluable help in preparing ACI UW for the Philadelphia Competition—none of this would have been possible without you. With your continued support, we're excited to improve and give our best effort at the ACI Spring Convention in Toronto as we compete in the FRC Bowling Ball Competition.

We're deeply grateful for everything you've contributed to our journey!





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