

# CCEE MONTHLY

The Department of Civil, Construction, & Environmental Engineering



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**Structural**



**Geotechnical**



**Water**



**Transportation**



**Environmental**



**Construction**

## Girl Scouts Day



Last month, we mentioned that a local Girl Scouts troop visited our school for a weekend event. 2 of our professors, Dr. Natalie Mladenov & Dr. Alicia Kinoshita, provided demonstrations. **Dr. Alicia Kinoshita**, pictured, is providing a demonstration to the Girl Scouts with her student assistant **Lauren Mathews**. The demonstration was hosted in her Hydraulics and Water Engineering lab which included the flume and a live terrestrial laser scanning.



## Happy Retirement to Alan Hanson



**Alan Hanson**, from Simpson Strong-Tie, is pictured here with **Dr. Janusz Supernak**. Alan & Simpson Strong-Tie have been helping the students of CCEE for many years. Thank you and we wish you the best on your retirement!

## 2 Week Graduate Course



**Prof. Victor M. Ponce** taught a two-week graduate course entitled "Road Drainage" at the Universidad Técnica Particular de Loja (Technical University of Loja), Ecuador, from July 2 to July 13, 2018.

## N.W.C. 2018 Summer Institute



**Kelly Flint** was selected to attend the National Water Center 2018 Summer Institute. The seven-week program was held at the University of Alabama in Tuscaloosa, where she focused on the computational aspects of the National Water Model. In July, **Dr. Alicia Kinoshita** attended Kelly's capstone presentation entitled, "Using dimensionless scaling parameters as decision metrics for heterogeneous routing schemes." Her co-authors included Maryam Asgari Lamjiri (University of California, San Diego) and Sean Matus (University of Illinois at Urbana-Champaign) and her project advisors were Ehab Meselhe (Water Institute of the Gulf) and Kyle Mandli (Columbia University). Their research this summer contributed to understanding the trade-off between computational accuracy and resource consumption for homogeneous and heterogeneous hydraulic routing schemes. This study proposes that there are instances when the Dynamic Wave method is not necessary to produce sufficiently accurate results and demonstrates that the incorporation of dimensionless scaling parameters can be used to initiate transitions between the Dynamic, Diffusive, and Kinematic Wave routing methods.

## CCEE Student Spotlight



**Valerio Ruchay** is an international student studying Water Resources Management in Germany. Valerio came to SDSU in January through the California State University/Baden-Württemberg Student Exchange Program. San Diego is perfect for Valerio, who is an enthusiastic surfer and fisher. Valerio is helping Dr. Kinoshita's team through his summer internship and is taking measurements to understand infiltration and soil moisture processes in urbanized coastal watersheds that have undergone riparian vegetation changes and brush fire. Valerio is supported by the German Programm zur Steigerung der Mobilität von Studierenden deutscher Hochschulen (PROMOS) scholarship, which supports the mobility of German undergraduate students for their final thesis (which will hopefully continue to be paid even after the Germans dropped out of the World Cup). After returning to bitterly cold and rainy Germany, Valerio will use the data collected from Alvarado Creek to write his Bachelor's thesis. After a gap year of working and traveling, Valerio plans to begin his master's degree in Civil Engineering in Water Management in Karlsruhe, Germany.

**Quotes of the Month:** "What we usually consider as impossible are simply engineering problems...there's no law of physics preventing them." – Michio Kaku

The Department of Civil Engineering strives to provide a world class, hands-on learning experience for all students in the Department. Many of the student organizations, events and activities are made possible by generous alumni and friends like you. If you have interest in supporting our efforts, please contact **Kate Carinder** in our Development Office at (619) 594-8264 or by email at [kcarinder@sdsu.edu](mailto:kcarinder@sdsu.edu). Please use the following link to give directly to the Department <http://campaign.sdsu.edu/civilengineering>