Earth & Environmental Engineering Graduate Student Symposium 2017

COLUMBIA | ENGINEERING
The Fu Foundation School of Engineering and Applied Science
Earth and Environmental Engineering

Date Friday October 27th 2017

Location Davis Auditorium (412 CEPSR)

Open to the public.

Time	Event
1:00 PM	Welcome
1:15 PM	Opening Keynote
2:15 PM	Session 1: Water Resources, Sustainable Energy, and Health Engineering
3:30 PM	Break
4:00 PM	Session 2: Carbon Management and Hydrological Modeling
5:15 PM	Closing Keynote
6:15 PM	Closing Remarks
6:30 PM	Poster Session

Opening Keynote: Membrane-Based Solutions for Challenging Waters

Dr. MaryTheresa Pendergast has a range of experience in water treatment technology research, design, and project management focused on membrane-based systems and applications. As Director of R&D at Oasys Water, she is leading a team to develop forward osmosis enabled solutions for treatment of the worlds most challenging waters through innovation in membrane performance, low energy draw solution recovery, and integrated systems design. MaryTheresa is a recognized and established author in the academic and water industry communities, and has published more than 24 journal articles and proceeding papers since 2007. She is an alumnus of the Earth & Environmental Engineering program, where she earned a B.S. in 2009, and holds an M.S. and Ph.D. from UCLA.

Closing Keynote: Impact from Rising CO_2 on the Hydrological Cycle

Dr. Pierre Gentine is a professor in the department of Earth and Environmental Engineering. He obtained his MSc and PhD from MIT. Pierre Gentine is working on land-atmosphere interactions, convection-clouds, and surface hydrology using conceptual models, numerical models and wide range of data analysis tools. His overall research objective is to understand how soil and atmospheric moisture organizes across different spatial and temporal scales and in particular how the interactions with the atmosphere, vegetation and landscape constrain this organization. Dr. Gentine has research interests in Land-atmosphere interactions, Hydrometeorology, Convection, Ecohydrology, Remote sensing, data assimilation of remote sensing measurements to estimate soil moisture and surface heat fluxes, land-surface models, and stochastic processes.