Claire Chang is recipient of an undergraduate research grant from USC’s Women in Science and Engineering (WiSE).

USC, SUMMER ’07— Claire Chang was chosen to assist in the soil analysis research group, in which she has been participating since spring semester. The research, led by Dr. Amy Rechenmacher, is focused on characterizing the nature of particulate-level straining in non-continuum geomaterials such as sands, and to study the behavior of such material at failure. In short, “it is crucial to understand the behavior of the soil we build on,” Claire said.

The test data and analysis results will contribute directly to several publications and conference presentations of separate studies of particulate-scale responses to loading.

Claire tumbled into civil engineering by accident. Her interest in architecture and engineering and many talents in science, computers and math, found a point of convergence in the field of civil engineering with an emphasis in building science.

She said that “although engineers can not prevent natural disasters from occurring, we can study and model the behavior of soil at failure and design our structures to counteract such failures.” Before becoming Dr. Rechenmacher’s research assistant, Claire had not considered graduate school. She is now being propelled in that direction by a great many unanswered questions.

Claire will be a senior in the fall. She was born in Taiwan and moved with her family to Fresno, CA when she was ten years old. Both of her siblings are also in college, her sister is a student at UCLA and her brother will attend UC, Berkeley in the fall.

WiSE administers a series of fellowships to encourage undergraduate engineering students to study, conduct research, and develop successful careers. The program also involves mentoring from successful engineers in their field of interest.

Learn more about USC’s WiSE at: usc.edu/programs/wise