ICSET opened fourth lab Aug. 5; founder, first director retiring

WKU’s Institute for Combustion Science & Environmental Technology (ICSET) unveiled its fourth laboratory, the Thermophysical Properties of Materials Laboratory, on Monday (Aug. 5). In addition, the official retirement celebration for ICSET’s founder and first director, Dr. Wei-Ping Pan, followed later that evening.

The retirement of Dr. Pan is a pivotal moment for ICSET. His successor as director is Dr. Yan Cao, who was one of WKU’s first research faculty members, alongside Dr. Quentin Lineberry. “My plan for the future is to continue developing our solid knowledge base of coal combustion technology, energy utilization and thermal analysis research,” Dr. Cao said.

Dr. Pan has been instrumental with the development of ICSET dating back to 1986. The Thermal Analysis Laboratory was established in 1986, which focuses on the effect of heat on solids, gases and liquids. In 2001, the Emission and Control Laboratory was created, which focuses on the sample and measure of byproducts of combustion. Thus, in typical Dr. Pan fashion, as he exits, he is still developing and growing the institute. The Thermophysical Properties of Materials Laboratory is designed to measure the physical properties of materials’ changes as a function of temperature.

ICSET has more than 20 years of research experience with fossil fuel combustion including high sulfur and high chlorine coals, MSW (RDF), and other fuels. ICSET has a multifunctional circulating fluidized bed combustion (0.6MW CFBC) system that is capable of making combustion runs with various fuels under varying conditions to analyze and monitor air pollutant emissions for industrial partners.

Under Dr. Pan’s leadership, ICSET has received more than $17 million as project director for more than 70 projects supported by agencies, including National Science Foundation, U.S. Department of Defense, U.S. Department of Energy, NASA, Environmental Protection Agency, Illinois Clean Coal Institute, and several other private industries.

Dr. Pan has been a leader in innovative research and was named one of China’s Top 1,000 professionals. During his tenure at WKU, he has published more than 170 peer-reviewed articles related to coal combustion, emission and thermal analysis. He has mentored more than 100 undergraduate students, 55 graduate students, and more than 150 visiting scholars over the past 27 years.