

Guangzhou University-Tamkang University Joint Research Center for Engineering Structure Disaster Prevention and Control was established in Guangzhou University in August 2008. The center, taking full advantage of the research platforms and professional teams of the two universities, effectively integrates the research resources from Guangdong Province and Taiwan to achieve a demonstration base for international scientific and technological cooperation. The center, taking the key technologies of civil



engineering disaster prevention and mitigation as the starting point, large-scale real projects as the carrier, and new technologies in disaster prevention and control of engineering structure as its core, conducts health monitoring research on high-rise buildings, large-span spatial structures, bridges, tunnels and other civil structures. The center also studies structural safety of such structures under external loads like strong typhoons, earthquakes, and ice and snow, and characteristics and consequences of catastrophic behavior under slow-changing disasters such as material aging, corrosion and fatigue damage accumulation. With



these efforts, we strive to create the theoretical system of structural health monitoring and to develop real-time synchronous monitoring and collaborative testing techniques.

The Center currently has 24 full-time researchers, all with doctorate degrees, including 9 professors, 12 associate professors, 1 Pearl River Scholar, 1 Outstanding Youth and Excellent Youth of National Natural Science Foundation, 1 New Century Outstanding Talent of the Ministry of Education, 1 Chief Scientist of Yangcheng (surname of Guangzhou) Scholars, 2 Provincial Talent of the

“Thousand-Hundred-Ten” Project, and 4 rising talent of Pearl River Science and Technology. The Center has nurtured more than 10 PhD students and 100 postgraduate students. In recent years, the Center has undertaken more than 20 National Natural Science Foundation projects and more than 20 provincial and ministerial projects. The total funding of these projects has exceeded 20 million Yuan. It has published more than 300 academic papers in SCI- and EI-indexed journals and has gained 6 international invention patents and 42 domestic invention patents. The Center has been awarded 2 Second-Level Prizes of Science and Technology Progress by the Ministry of Education and 2 Second-Level prizes of Science and Technology Progress by Guangdong Province. In addition, the center also serves the construction engineering for developing local economy, by undertaking health monitoring projects for many landmark bridges, super high-rise buildings and large-span roof structures. It has gained extensive impact in the engineering industry.

Till now, the Center has established the following platforms:

- ✧ Guangzhou Municipal Key Laboratory for Structural Safety and Health Monitoring
- ✧ Research Center of Guangdong Education Department for Structural Safety and Health Monitoring
- ✧ Engineering Technology Research and Development Center of Guangdong Province for Engineering Structure Wind Resistance and Health Monitoring
- ✧ International Science and Technology Cooperation Base of Ministry of Science and Technology for Engineering Structure Wind Resistance and Structural Safety



